





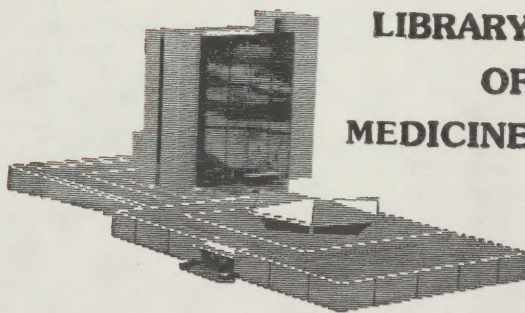
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FOR AGT: *Green J. Collins*  
 FOR AGT: *Dr. C. M. C.*  
 FOR AGT: *P. H. Kossay Jr.*  
 FOR AGT: *Lt. Col. M. C.*

CONCURRED IN:

WAR DEPARTMENT,  
 Army Service Forces,  
 Washington, D. C.,

Date Submitted \_\_\_\_\_

Date Approved by ASF: *7 April 1945*

*SPTRV 370.01 (PI) (20 Dec 44)*

*Theodore J. Collum*

THEODORE J. COLLUM,  
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PROGRAMS OF INSTRUCTION

FOR

MEDICAL DEPARTMENT ENLISTED TECHNICIANS

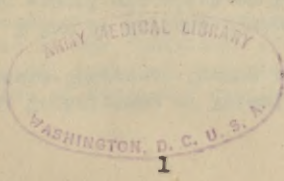
<u>COURSE</u>	<u>SSN</u>	<u>WEEKS</u>	<u>NO. OF HOURS</u>
Dental Technician	855-067	12	528 - 576
Laboratory Technician	858	16	704 - 768
Medical and Surgical Technician (Phase I)	409-861	8	352 - 384
Medical Technician (Phase II)	409	4	176 - 192
Surgical Technician (Phase II)	861	4	176 - 192
Medical Technician (Advanced)	409	12	528 - 576
Surgical Technician (Advanced)	861	12	528 - 576
Pharmacy Technician	859	12	528 - 576
Veterinary Technician and Meat and Dairy Hygienists	250-120	12	528 - 576
X-Ray Technician	264	16	704 - 768
Medical Equipment Maintenance Technician	229	16	704 - 768
Optical Technician	365	6	264 - 288

MISSION: To technically train enlisted men so that they may qualify as dental, laboratory, medical, surgical, medical (advanced), surgical (advanced), pharmacy, x-ray, medical equipment maintenance, veterinary technicians, or meat and dairy hygienists or optical technicians.

SCOPE: Lectures, conferences, demonstrations, applicatory exercises, and "on-the-job" training will include instruction in the elementary and special technical subjects necessary to give the enlisted man the knowledge required for him to function satisfactorily as a Medical Department enlisted technician in one of the various specialties. Athletics and Mass Games (to include swimming when possible), Army Orientation and Concurrent Basic Military Training will be given to all personnel taking these courses.

PREREQUISITES:

1. For all courses: Basic Military Training.





(Continued)

2. For Medical & Surgical Technicians or Veterinary Technicians and Meat and Dairy Hygienists Courses: Common school education.
3. For Dental, Pharmacy, X-Ray or Medical Equipment Maintenance Technicians Courses: High school education or its equivalent.
4. For Laboratory Technicians: High school education or its equivalent, and normal color perception.
5. For Advanced Medical or Surgical Technicians: Completion of the Medical & Surgical Technicians Course (SSN 409-861).
6. For Optical Technicians: Civilian occupational classification as Optician (SSN 365).

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WAR DEPARTMENT  
ARMY SERVICE FORCES

WASHINGTON, \_\_\_\_\_

TRAINING PROGRAM

FOR

MEDICAL DEPARTMENT TECHNICIANS\*

	Paragraph
SECTION I	General
	Authorization 1
	Purpose 2
	Application 3
	Modification 4
	Scope of Instruction 5
SECTION II	Concurrent Basic Military Training
	For Personnel <u>on</u> Redeployment
	Summary Program 6a
	Detailed Program 6b
	For Personnel <u>not</u> on Redeployment
	Summary Program 7a
	Detailed Program 7b
SECTION III	Programs of Instruction for Technical Training
	Dental Technician (855,067) 8
	Laboratory Technician (858) 9
	Medical & Surgical Technicians (409,861) 10
	Medical Technician (Advanced) 11
	Surgical Technician (Advanced) 12
	Pharmacy Technician (859) 13
	Veterinary Technician & Meat & Dairy 14
	Hygienist (250-120) 14
	X-Ray Technician (264) 15
	Medical Equipment Maintenance Technician (229) 16
	Optical Technician (365) 17

SECTION I

General

1. Authorization. This training program is issued in compliance with ASF Memorandum SPTRN 370.01 (PI) (20 Dec 44), dated 20 December 1944, as amended by ASF Memorandum SPTRN 370.01 (PI) (20 December 44), dated 19 February 1945.

2. Purpose. To furnish a general guide for the balanced training of technicians in Medical Department Enlisted Technicians Schools.

3. Application. a. This program applies to the instruction and training of enlisted personnel pursuing courses of instruction in enlisted technician's schools of the Medical Department. Based upon the detailed programs, training schedules will be prepared by the commandant of each school. Schedules will be prepared so that all technical training, orientation, and time reserved for the commandant occurs other than on Wednesday and Saturday afternoon.



b. For all personnel: The instruction week will consist of six (6) days.

For personnel undergoing redeployment training: Two hours of Athletics, Mass Games, and when feasible, swimming and two hours of Concurrent Basic Military Training will be given on Wednesday afternoons. No instruction will be scheduled for Saturday afternoons; therefore the training week will consist of forty-four (44) hours. Concurrent Basic Military Training Program for this class of personnel follows as paragraph 6.

For personnel NOT undergoing redeployment training: Two (2) hours of Concurrent Basic Military Training and two (2) hours of Athletics, Mass Games, and when feasible, swimming will be scheduled for both Wednesday and Saturday afternoons. The training week will consist of forty-eight (48) hours for this group. Concurrent Basic Military Training Program for this class of personnel follows as paragraph 7.

More time per week may be authorized when desirable but instruction time will not consist of more than sixty (60) hours per week under any circumstances.

c. "Time reserved for the Commandant" will be used for processing, make-up and review, testing, inspections and any new subject which it may be advisable to cover.

d. All training conducted under these programs should be directed toward operations against Japan whenever practicable.

e. In order to obtain the latest references, it is essential to consult the most recent edition of FM 21-6, which contains a list of training publications, and FM 21-7, which contains a list of training films, film strips and film bulletins. These manuals are frequently revised. Normally, field and technical manuals, Army Regulations, training circulars, training films and film strips will contain sufficient instructional matter for training purposes. Standard texts which are necessary for instruction in some subjects are shown in parenthesis in the references for each subject. Maintenance Manuals for Medical Equipment are in the process of production constantly. Those which are already available have been used as references in the MENT course. In the event that manuals are not yet available, the MSSS textbook and other appropriate literature will be used as references for instruction.

f. The program for Medical and Surgical Technicians (409-861) is arranged so that Phase I, consisting of 8 weeks didactic instruction, will be given to personnel in training for either SSN. A Phase II, consisting of 4 weeks applicatory training, has been arranged with specific reference to either Medical Technicians (409) or Surgical Technicians (861). An individual will be considered qualified for either SSN, only after completion of 12 weeks of training consisting of Phase I (8 weeks) and Phase II (4 weeks) for the appropriate SSN.

g. The Program for Veterinary Technicians and Meat and Dairy Hygienists has been arranged to fulfill the needs of all of the major forces of the Army. The program consists of 6 weeks devoted to instruction for Veterinary Technicians (20) and 6 weeks devoted to instruction for Meat and Dairy Hygienists (120). Personnel will be considered qualified for either SSN after successful completion of the appropriate 6 weeks of training or they will be considered qualified for both SSNs after successful completion of the entire 12 weeks training.



4. Modification. Deletions from the scope of instruction outlined in the detailed programs will be made only upon the approval of The Surgeon General. Minor modifications, in order to make the best use of instructional facilities and expedients, and to conform to local conditions affecting training, may be made without reference to higher headquarters. Progressive and balanced training, however, will be observed at all times.

5. Scope of Instruction. a. General. In general, training will be conducted in accordance with doctrine prescribed in FM 21-5, TM 21-250, and TF 7-295.

b. Basic Training: Training is continued in the basic subjects to improve and maintain the trainee's knowledge of these subjects. Training in this category should be directed toward operations against Japan whenever practicable.

c. Army Orientation: This subject is presented in an effort to impress the trainee with the reasons why we are involved in this war, to keep him abreast of current developments, and to point out the importance of his individual role and that of his unit in the over-all effort.

d. Athletics and Mass Games: Time is allotted to this subject to provide diversion and improve or maintain the physical fitness of the trainee. Swimming will be included when feasible.

e. Technical Training: The subjects, scope, references, total hours and hours per week are shown in the detailed programs for the individual courses.

f. Method of Presentation: The following symbols are used to denote the methods:

- L - Lecture
- C - Conference
- D - Demonstration
- E - Applicatory Exercise
- E - Examination

This training program supersedes "Training Program for Medical Department Technicians" dated 26 June 1944, as approved by first indorsement SPTRS 352.11 (Med) (26 Jun 44), dated 11 July 1944, and "Training Program for Medical Equipment Maintenance Technicians," dated 8 June 1944, as approved by 1st Indorsement SPTRS 352.11 (Med) (24 Nov 43), dated 10 June 1944.



Program for Medical Department Enlisted Technicians

Summary Program, Par. 6a.

Concurrent Basic Military Training  
(For Personnel on Redeployment)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Concurrent Basic Military Training	Care of clothing and equipment; map reading; personal and sex hygiene; transportation of sick and wounded; sanitation and sentry appliances; safeguarding military information and censorship of mail; individual security, hasty entrenchment and shelter; defense against chemical attack; defense against mechanized attack; defense against air attack; camouflage; malaria control and discipline.	FM 3-5, 5-15, 5-20, 7-10, 8-35, 21-15, 21-10, 21-11, 21-25, 21-75, 21-80, 30-30, 72-20, 100-5; TM 8-220, 9-2800; AR 40-205, 380-5; ASF Cir. 42, 1944; WD Cir 223, 1943; TC 108, 1943; TF 1-3343, 1-3351, 3-689, 5-645, 5-649, 7-233, 7-234, 7-993, 8-953, 8-1174, 8-1179, 8-1238, 8-2060, 8-2096, 11-324, 21-2073, 21-2074; MF 1113; FS 8-57, 8-58, 8-71, 10-149; FB 149; Recognition Films and Slides; WD Pam. 21-13; GTA 1-1, 3-1, 3-3, 3-4, 3-5, 5-1, 5-2, 5-3, 5-4, 5-12, 7-2, 7-3, 8-1, 8-4, 8-7 to 17 incl., 17-1, 21-4, 21-5	L, C, D, AE 12 wks 24 16 wks 32	2	2	2	2	2	2	2	2	2	2	2	2	2	2			



## Program for Medical Department Enlisted Technicians

## Summary Program, Part 6a

Concurrent Basic Military Training  
(For Personnel On Redeployment)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
					16	17	18	19	20	21	22	23	24	25	26	27	28	29
2. Athletics and Mass Games	Recreational exercises; supervised group games to develop team spirit and swimming when possible.	FM 21-20	D, AE	24 32	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)
3. Army Orientation	An understanding of why we fight; course of military actions; im- portance of personal and organiza- tion role in current war.	"Army Orienta- tion Course;" 14 Aug 43; "News Map"; WD Pamph- let 20-3, 10 Dec 43; Orienta- tion Pamphlets and Kits.	L, C, D	24 32	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)
TOTAL HOURS				12 wks. 16 wks.	72 96	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)



Program for Medical Department Enlisted Technicians

8

Detailed Program, Par. 6b

Concurrent Basic Military Training  
(For Personnel on Redeployment)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
BASIC 1. Concurrent Basic Military Training			12 wks 16 wks	24 32																
a. Care of Clothing and Equipment	A review of the correct manner of wearing the uniform; the care; display, and preservation of clothing and equipment. Special care of clothing and equipment in the tropics.	FM 21-15, par. 107-111; FM 72-20, par. 30-30, MF 1113; FS 10-149, WD Pam. 21-13; GTA 21-4.	L,D	(2) (3) (2)	2														(1)	
b. Map Reading	Review of the principles of map reading, orientation in the field.	FM 21-25, Chs. 2,3; TF 7-235, 21-2073, 21-2073, 21-2074; GTA 5-2, 5-12;	L,D	(3) (3) (2)	2	1														
c. Personal & Sex Hygiene	An understanding of the importance of personal hygiene, including a thorough knowledge of the importance of sex hygiene and methods of preventing venereal disease. Preventive measures against tropical skin diseases.	FM 21-10, Chs. 6,9; AR 40-205; TF 8-1238 or 8-2060; 8-2096; FS 8-57, 58.	L,D	(1) (2) (2)		1												(1)		
d. Transportation of Sick & Wounded	Individual and litter carries; ambulances loading and unloading. Difficulties encountered in transporting casualties in the jungle.	FM 8-35, Ch. 2; FM 21-11, par. 65-67; FM 72-20, par. 89; FB 147; FS 8-71	C,AE	(2) (2) (2)			2													
TRAINING PROGRAM FORM SG 428, AUG 12 1943																				



Program for Medical Department Enlisted Technicians

Concurrent Basic Military Training

Detailed Program, Par. 6b

(For Personnel On Redeployment)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	HOURS PER WEEK														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
e. Sanitation and Sanitary Appliances	Group sanitation; construction and function of sanitary installations and expedients. Direct instructions toward sanitary measures required and difficulties encountered in construction in the tropics.	FM 21-10, Ch. 8; TF 8-1174; TF 8-1179; FM 72-20, par. 16-22; WDP 21-13	C, D, AE (4) (4)					2	2									
f. Safeguarding Military Information and Censorship of Mail	The necessity for care in action, conduct, speech and letter writing so as not to disclose vital military information.	AR 380-5; TF 11-324; ASF Cir. 42, 1944.	L, D (1) (2)						1	(1)								(1)
g. Individual Security, hasty entrenchment and shelter	A review of the essentials of scouting and patrolling and the use of cover and concealment; the necessity for care and caution in all actions; the advantages of terrain; the construction of individual shelter.	FM 5-16; FM 7-10; FM 21-75, Ch. 1, Sec. 1, Ch. 2; TF 7-234; 7-993; GTA 7-2	L, D (1) (2)							1	(1)							(1)
h. Defense Against Chemical Attack	The gas mask; review of the principle chemical agents; their use and identification.	. 3-6, Ch. 1; TM 8-220, par. 348-383; TF 3-689; GTA 3-1, -3, -4, -5.	L, C (2) (3)									2						(1)
i. Defense Against Mechanized Attack	A review of types of armored vehicles and their use; passive measures of defense. Identification of Japanese armored vehicles.	FM 100-5, pars. 250-254, 697-626; TM 9-2800; FM 21-80; GTA 17-1	C (1) (2)										1					(1)



**Program for Medical Department Enlisted Technicians**

**Detailed Program (Cont) Part 6b**

**Concurrent Basic Military Training  
(For Personnel On Redeployment)**

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. (Cont)																				
j. Defense Against Air Attack	A review of identification of friendly and hostile aircraft; passive measures of defense. Stress identification of Japanese aircraft.	FM 30-30; Sec. I Recognition film slides and films GTA 1-1	C	(1) (2)														1 (1)		(1)
k. Camouflage	Knowledge of use of camouflage; importance of camouflage discipline; camouflage material.	FM 5-20, Chs. 3, 4; TF 5-645, TF 5-649; TF 1- 3351; GTA 5-1, -2 -4.	C	(2) (2)														2 (2)		(1)
1. Malaria Control and Discipline	Prevention and control of malaria.	WD Cir 223, 1943; TC 108, 1943; TF 8-253, 1-3343; GTA 8-4.	L, C	(4) (4)														2 (2)	2 (2)	
2. Athletics and Mass Games	Recreational exercises; supervised group games to develop team spirit and swimming when possible.	FM 21-20	D, AE	24 (32)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)
3. Army Orientation	An understanding of the causes and events leading to the United States becoming a combatant in this global war; understanding of the principles for which we are fighting and of the dangers to American principles arising from axis policies & axis aggressions; information on the course of all military actions but particularly those in which US forces have participated, and on other phases of the war effort; the importance of the trainee's	"Army Orientation Course; 14 Aug 43; 'News Map;" WD Pamphlet 20-3, 10 Dec 43; Orientation Pamphlets and Kits.	L, C, D	24 (32)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)
TRAINING PROGRAM FORM 56 428, AUG 10 1943																				



Program for Medical Department Enlisted Technicians

Detached Program (Cont (Par 5b))

Concurrent Basic Military Training  
(For Personnel On Redeployment)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
3. (Cont)	personal role and that of his organization in the current war.																			
TOTAL HOURS			12 wks. 16 wks.	72 (96)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)	6 (6)

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Medical Department Enlisted Technicians

STANDARD PROGRAM, SEC. II, Par. 7a

Concurrent Basic Military Training  
(For Personnel Not On Redeployment)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
					16 weeks													
1. Concurrent Basic Military Training	Dismounted drill; organization of the army; organization of the medical department; care of clothing and equipment; military discipline; customs, and courtesies; map reading; personal and sex hygiene; Articles of War and Army Regulations; first aid; transportation of sick and wounded; sanitation and sanitary appliances; safeguarding military information and censorship of mail; individual security and hasty entrenchment; defense against chemical attack; defense against mechanized attack; defense against air and air-borne attack; camouflage; malaria control and discipline.	TM 3-5, 5-15, 5-20, 7-10, 8-10, 8-35, 8-50, 21-10, 21-11, 21-15, 21-25, 21-50, 21-75, 21-80, 22-5, 30-30, 72-20, 100-5, 101-10; TM 8-220, 9-2800, 27-255; AR 40-205, 380-5; WD Cir. 223, 1943; ASF Cir. 42, 1944; TG 108, 1943; NCM 1928; WDP 21-13; TM 1-3343, 3-689, 5-645, 5-649, 7-233, 7-234, 7-993, 8-953, 8-1174, 8-1179, 8-1180, 8-1238, 8-2047, 8-2049, 8-2060, 11-235, 11-324, 19-2034, 21-2048; XT 1113; TS 8-57, 8-58, 8-59, 8-61, 8-62, 8-69, 8-70, 8-71, 8-75, 8-76, 8-80; TB 147; Recognition Films and Slides; ODA	I, C, D, AE	12 weeks	4	4	4	4	4	4	4	4	4	4	4	4		
				(64)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	



Program for Medical Department Enlisted Technicians

Summary Program, Sec. II, Part 7a.

Concurrent Basic Military Training  
(For Personnel Not On Redeployment)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2. Athletics and Mass Games	Recreational exercises; supervised group games to develop team spirit and swimming when possible.	TM 21-20	D, AE	12 wks 48 hrs 16 wks (64)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
3. Army Orientation	An understanding of why we fight; course of military actions, importance of personal and organization role in current war.	"Army Orientation Course", 14 Aug 43; "New Map: WD Pamphlet 20-3", 10 Dec 43; Orientation Pamphlets & Kits	L, C, D	12 wks 24 hrs 16 wks (32)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
TOTAL HOURS		Twelve Week Course. Sixteen Week Course.		120 (160)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	

TRAINING PROGRAM FORM SG 428, AUG 10 1943

# Program for Medical Department Enlisted Technicians

Detailed Program, Par. 7b

Concurrent Basic Military Training  
(For Personnel Not On Redeployment)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<u>BASIC</u>																				
1. Concurrent Basic Military Training			12 wks. (16 wks.)	48 64																
Dismounted Drill	Positions of attention, rests, eyes right or left, facings, salute with hand.	FM 22-5, Ch. 2, Sec. II	D,AE	(1) (2)	1 (1)															
(1) Positions																				
(2) Steps in Marching	Quick time, double time, halt, mark time, half step, side step, back step, face in marching, march by flank.	FM 22-5, Ch. 2, Sec. III	D,AE	(2) (2)		1 (1)	1 (1)													
(3) The Squad	Forming, close and normal interval, marching to flank, changing direc- tion, forming column of two from single file and reforming.	FM 22-5, Ch. 4, Sec. I	D,AE	(3) (4)			1 (1)	1 (1)	1 (1)											
(4) The Platoon	Composition and formation; forming, marching and dismissing the pla- toon; guide in marching; changing direction; marching toward flank.	FM 22-5, Ch. 4, Sec. II	D,AE	(3) (4)				1 (1)	1 (1)											
(5) Inspection and Ceremonies	Forming for inspection; inspection; retreat parade.	FM 22-5, Ch. 9, Secs. I, III, IV	D,AE	(3) (4)								1 (1)	1 (1)							
b. Organization of the Army	A review of the organization of the Army and the organization and func- tion of the various arms to which Medical Department Enlisted Person- nel are attached.	FM 100-5, par. 1-24; FM 101- 10; Ch. 1; FS 8-75, 8-76	D,C	(2) (2)	2 (2)															
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				



## Program for Medical Department Enlisted Technicians

## Detailed Program (cont) Par. 7b

Concurrent Basic Military Training  
(For Personnel Not On Redeployment)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. (cont)																				
c. Organization of the Med. Dept. and Medical Units	A brief survey of Medical Department activities, units and installations.	FM 8-10, Ch. 1, 11	L	(2) (2)	1 (1)	1 (1)														
Care of Clothing & Equipment	A review of the correct manner of wearing the uniform; the care, display, and preservation of clothing and equipment. Special care of clothing and equipment in the tropics.	FM 21-15, par. 107-111; FM 72-20, par. 30-32; NF 1113; GMA 21-4	L,D	(2) (3)	2 (2)													(1)		
e. Military Discipline, Customs, and Courtesies	The development of a high standard of courtesy; and understanding of the necessity for discipline.	FM 21-50, Sec. I, 11, 111; TF 21-2048; MCM 1928 (See AW 110); GMA 21-5	L,D	(2) (3)	2 (2)													(1)		
f. Map Reading	Review of the principles of map reading, orientation in the field.	FM 21-25, Chs. 2, 3; TF 7-233; GMA 5-2	L,D	(3) (3)	1 (1)	2 (2)														
g. Personal & Sex Hygiene	An understanding of the importance of personal hygiene, including a thorough knowledge of the importance of sex hygiene and methods of preventing venereal disease. Preventive measures against tropical skin diseases.	FM 21-10, Chs. 6, 9; AR 40-205; TF 8-1238 or 8-2060; FS 8-58, 57 59,	L,D	(1) (2)	1 (1)													(1)		
h. Articles of War and Army Regulations	A review of the punitive Articles of War and the pertinent use of Army Regulations.	TM 27-255; Manual I, D of Courts Martial, 1928; TF 11-235, 19-2034		(2) (2)	2 (2)															
TRAINING PROGRAM FORM SA 428, AUG 10 1943																				

# Program for Medical Department Enlisted Technicians

## Concurrent Basic Military Training (For Personnel Not On Redeployment)

Detailed Program (cont) Par. 7b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
(cont)															
i. First Aid	A review of first aid.	FM 8-50; Sec. II, III; FM 21-11, Ch. 2, 3; TF 8-1180; 8-2047, 8-2049; FS 8-60; 8-69, 8-70	L, D	(5) (8)					1 (1)	3 (3)	1 (1)				
j. Transportation of Sick and Wounded	Individual and litter carriers; ambulance loading and unloading. Difficulties encountered in transporting casualties in the jungle.	FM 8-35, Ch. 2; FM 21-11, par. 65-67; FM 72-20, par. 89; FS 8-71; TB 147	C, AE	(2) (2)						2 (2)					
k. Sanitation & Sanitary Appliances	Group sanitation; construction and function of sanitary installations and expedients. Direct instructions toward sanitary measures required and difficulties encountered in construction in the tropics.	FM 21-10, Ch. 8; TF 8-1174; TF 8-1179; FM 72-20, par. 16-22; FS 8-61, 862; WDP 21-13.	C, D, AE	(2) (4)						2 (2)					
l. Safeguarding Military Information & Censorship of Mail	The necessity for care in action, conduct, speech and letter writing so as not to disclose vital military information.	AR 360-5; TF 11-324; ASF Cir 42, 1944	L, D	(1) (2)						1 (1)					
m. Individual Security, hasty entrenchment & Shelter	A review of the essentials of scouting and patrolling and the use of cover and concealment; the necessity for care and caution of all actions; the advantages of terrain; the construction of individual shelter.	FM 5-15; FM 7-10; FM 21-75, Ch. Sec. 1, Ch. 2; TF 7-234, 7-993; GMA 7-2	L, C	(2) (2)							2 (2)				



## Program for Medical Department Enlisted Technicians

## Detailed Program (cont) Par. 7b

Concurrent Basic Military Training  
(For Personnel Not On Redeployment)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. (cont)																				
u. Defense Against Chemical Attack	The gas mask; review of the principle chemical agents; their use and identification.	TM 3-5, Ch. 1; TM 8-220, par. 348-383; TF 3-689; GMA 3-1, -2, -3, -4, -5	L.C	(2) (3)										1 (1)	1 (1)					(1)
o. Defense Against Mechanical Attack	A review of types of armored vehicles and their use; passive measures of defense. Identification of Japanese armored vehicles.	TM 100-5, para. 250-254, 597-626; TM 9-2800; TM 21-60; GMA 17-1	O	(1) (1)										1 (1)						
p. Defense Against Air Attack	A review of identification of friendly and hostile aircraft; passive measures of defense. Stress identification of Japanese aircraft.	TM 30-30, Sec. I; Recognition film slides and films as listed in TM 21-7; GMA 1-1	O	(1) (1)										1 (1)						
q. Camouflage	Knowledge of use of camouflage; importance of camouflage discipline; camouflage material.	TM 5-20, Chs. 3, 4; TF 5-645; TF 5-649; GMA 5-1	O	(2) (3)												2 (2)				(1)
r. Malaria Control and Discipline	Prevention and control of malaria.	WD Cir. 223, 1943; L.C TC 108, 1943; TF 8-953, 1-3343; GMA 8-4	L.C	(4) (4)												1 (1)	3 (3)			
2. Athletics & Mass Games	Recreational exercises; supervised group games to develop team spirit and swimming when possible.	TM 21-20	D, AE	48 (64)	4 (4)	4 (4)	4 (4)	4 (4)	4 (4)	4 (4)	4 (4)	4 (4)	4 (4)	4 (4)	4 (4)	4 (4)	4 (4)	4 (4)	4 (4)	
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

**Program for Medical Department Enlisted Technicians**

21

Detailed Program (cont) Part 7b

Concurrent Basic Military Training  
(For Personnel Not On Redeployment)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
					15	16												
3. Army Orientation	An understanding of the causes and events leading to the United States becoming a combatant in this global war; understanding of the principles for which we are fighting and of the dangers to American principles arising from axis policies and axis aggressions; information on the course of all military actions but particularly those in which U.S. forces have participated, and on other phases of the war effort; the importance of the trainee's personal role and that of his organization in the current war.	"Army Orientation Course," 14 Aug 43; "News Rep," WD Pamphlet 20-3, 10 Dec 43; Orientation Pamphlets and Kits.	L.C.D	24 (32)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)
TOTAL HOURS		Twelve Week Course		120 (160)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)	10 (10)



Program for Dental Technicians

Technical

Summary Program Par. 8a

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<u>TECHNICAL</u>																				
4. Dental Anatomy	To assure a knowledge of anatomy of the teeth and supporting tissues.	TM 8-225. (Gray's Anatomy; Mouth Hygiene, Jones) TP 8-2096	I, D	10	10															
5. Materials and Metallurgy	Metals and alloys used in dentistry; metallurgic principles; denture base materials.	TM 8-225. (Dental Materials; Hodggen-Shell; Complete Dentures, Swenson)	I, C, D	16	16															
6. Tooth Carving	To develop a certain digital dexterity; to present dental anatomy through the carving of soap and plaster teeth.	NONE	AE	28	10	18														
7. Dental Records	Discussion of commonly used abbreviations and symbols; clinical records; monthly reports; Medical Department property; supplies and methods of handling all Dental Department forms.	TM 2-220 TM 8-225	C, D, AE	4	4															

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Dental Technicians

Technical

Summary Program (Dental) *See p. 6a*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
					15	16												
8. Dental Roentgenology	To develop methods of taking and processing various dental roentgenograms.	TM 1-145; TM 8-225; TM 8-250 (Fundamentals of Roentgenologic Physics & Tech., McGraw & Megner; Manual of Roentgenologic Tech., Sante.)	I, C, D	12		12												
9. Dental Hygiene	Methods of maintaining health of teeth and their surrounding tissues.	TM 8-225. (Month Hygiene, Jones)	D, C	6		2	4											
10. Chair Assisting	Duties of chair assistant; care of chair and unit; care and sterilization of instruments; familiarization with ID Chest 60.	TM 8-220; TM 8-225	C, D, AE	14			14											
11. Inlays, Crowns and Bridges	Correct technique for construction of crowns, inlays and bridges.	TM 8-225	C, D, AE	36			18	18										
12. Impressions	To familiarize the student with materials and methods used in dental impressions.	TM 8-225, (Complete Dentures, Swenson.)	C, D, AE	6			6											
13. Clasp	Use and construction of dental clasps with actual work in laboratory.	TM 8-225 (Key's Surveyor Book.)	C, D, AE	27			12	15										
14. Full Dentures	Setting up teeth and construction of full dentures of vulcanite, acrylic resin, and other materials.	TM 8-225, (Complete Dentures, Swenson)	I, C, D, AE	137				21	36	36	36	8						
15. Partial Dentures	Setting up and construction of partial dentures.	TM 8-225 (Key's Gold Book)	I, C, D, AE	108								28	36	36	8			

TRAINING PROGRAM FORM 36 428, APR 10 1943



Program for Dental Technicians

Technical

Summary Program (cont'd) p. 8a

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK																				
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16					
16. Fractures and Splints	Fractures of the maxilla and mandible; first aid treatment; splints and splinting	TM 8-225; TS 8-31, 32, 33, 34, 35, 36, 37	C.D., AF	28													28								
17. Time Reserved for the Commandant				24	2	2	2	2	2	2	2	2	2	2	2	2	2								
TOTAL HOURS				456	38	38	38	38	38	38	38	38	38	38	38	38	38								

TRAINING PROGRAM FORM SG 428, AUG 10 1948

Program for Dental Technicians

Technical

Detailed Program

201.8A

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<u>TECHNICAL</u>																				
4. Dental Anatomy				10																
a. Introduction	Purpose and scope of the course; importance of anatomy in dentistry.	TM 8-225, Ch. 2	L,D	(1)	1															
b. Army System of Naming Teeth	Names and numbers of each tooth and reason for their use; abbreviations; surfaces; tooth form.	TM 8-225, Ch. 2	L,D	(1)	1															
c. Supporting Tissues	Names and structure of tissue supporting the teeth and the relationship of these structures to the teeth.	TM 8-225, Ch. 2 (Mouth Hygiene, Jones, Ch. 1; Gray's Anatomy)	L,D	(1)	1															

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Program for Dental Technicians

Technical

Detailed Program (Cont'd) *See p. 12*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4. (Cont'd)																				
d. Maxillae	The maxilla, hard and soft palate; landmarks of these structures.	TM 8-225, Ch. 2° (Mouth Hygiene, Jones, Ch. 1; Gray's Anatomy)	L,D	(2)	2															
e. Mandible	The mandible; its landmarks; the temporo-mandibular articulation.	TM 8-225, Ch. 2 (Mouth Hygiene, Jones, Ch. 1; Gray's Anatomy)	L,D	(2)	2															
f. Muscles of Mastication	Names and attachments of each muscle and its action.	TM 8-225, Ch. 2 (Jones, Ch. 1; Gray's Anatomy)	L,D	(2)	2															
g. Anatomy and Physiology of the Teeth	Structure and function of the teeth	TM 8-225, Ch. 2. (Jones, Ch. 2; Gray's Anatomy)	L,D	(1)	1															
5. Materials and Metallurgy				16																
Impression Materials in Full Denture Construction	The use of plaster; impression compound and hydrocolloids in full denture construction.	TM 8-225, Ch. 3, Sec. I, II, III, IV, V. (Dental Materials, Hodggen-Shell, Ch. 23.)	C,D	(2)	2															
b. Impression Materials Used in Partial Construction	The use of plaster; impression compound and hydrocolloids in partial denture construction.		C,D	(2)	2															
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Dental Technicians

Theoretical

Detailed Program (cont) Par 8b Sec III

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

5. (cont)																				
c. Dental Plasters	Types, uses and composition of dental plasters.	TM 8-225, par.18-22 (Complete Dentures, Swenson, pp. 534-538)	L, D	(1)	1															
d. Waxes	Different types of waxes and their uses and characteristics.	(Hodgen-Shell, pp. 389-391)	C, D	(3)	3															
e. Physical Properties of Metals	Color, specific gravity, expansion, conductivity, fusibility, volatility, weldability, hardness, malleability, ductility, elasticity, tenacity, fatigue, resiliency, proportional limit, yield point, elongation and ultimate tensile strength.	(Hodgen-Shell, Ch. 2, 9)	C, D	(2)	2															
f. General Considerations of Metals	Comparison of their uses, corrosive properties and characteristics with heat treatment.	(Hodgen-Shell), Ch. 2,3,4,9)	L, D	(1)	1															
g. Gold, Silver and Copper	Characteristics, physical properties and uses in dentistry.	(Hodgen-Shell), Ch. 7, 8, 11)	L, D	(1)	1															
h. Platinum, Palladium and Mercury	Characteristics, physical properties and uses in dentistry.	(Hodgen-Shell), Ch. 7)	L, D	(1)	1															
i. Zinc, Lead, Tin, Aluminum, Chromium and Cobalt	Characteristics, physical properties, and uses in dentistry.	(Hodgen-Shell), Ch. 11)	L, D	(1)	1															

TRAINING PROGRAM	FORM SA 428, AUG 10 1948
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TRAINING PROGRAM FORM SG 428, AUG 10 1943



## Program for Dental Technicians

## Technical

## Detailed Program (cont) Sec. III, Par. 8b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5. (cont)																				
j. Chromium Cobalt Alloys	Characteristics, physical properties, and uses in dentistry.	(Hodge-Shell), Ch. 6)	L, D	(1) 1																
k. Gold Alloys	Types of alloys, their characteristics and uses in dentistry.	(Hodge-Shell), Ch. 10)	L, C	(1) 1																
6. Tooth Carving	Practical exercise in the pouring of plaster blocks and carving of an incisor, cuspid, bicuspid, lower and upper molar.	NONE	AE	28 10 18																
7. Dental Records				4																
a. Clinical & Monthly Records	Reasons for records and uses of AGO forms #8-40, 8-43, 8-98, 8-103, 8-116, 8-142, 8-143, 8-144	TM 8-225, par. 202-206	C, D, AE	(1) 1		1														
b. Dental Classification	Classification of dental patients and authorized abbreviations.	TM 8-225, par. 206-	C, D	(1) 1		1														
c. Medical Dept. Dental Forms	Detailed discussion of AGO No. 8-98 (Med #57) and 8-116 (MD #79).	TM 8-225, par. 202-204	C, D	(1) 1		1														
d. Property Forms	Classification of Medical Department property and use of AGO #1445; records necessary for special dental material.	TM 8-225, Ch. 7	C, D	(1) 1		1														
8. Dental Roentgenology				12																
a. Fundamental of Electricity	Electron theory and terms used in electricity.	TM 1-445, Sec II, 8 L, C pp. 68-69		(1) 1		1														
TRAINING PROGRAM FORM SG 426, AUG 10 1943																				

Program for Dental Technicians

Technical

Detailed Program (Cont'd) *See pp. 5 & 6*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
(a)																				
b. Methods of Producing Electricity & Electrical Instruments	Magnetism; electromagnetism; direct and alternating current; instruments used to measure electricity.	(Fundamentals of Roentgenologic Physics, and Technique, McGraw & Wagner, pp. 15-16)	C, D	(1)	1															
c. Transformers	Types of transformers; general uses; use in x-ray machines.	(Manual of Roentgenology Technique, Sante, pp. 17-20.)	C, D	(1)	1															
d. Production & Properties of X-rays	Production of x-rays; characteristics and physical properties of x-ray beam.	(Sante, pp. 25-44.)	C, D	(1)	1															
e. X-Ray	Construction and wiring diagram of x-ray machines; characteristics desired in dental x-ray machine.	(Sante, pp. 17-20.)	C, D	(1)	1															
f. Protection	Electrical and x-ray dangers; protective measures required in use of x-ray.	TM 8-240, pp. 42-45	C, D	(1)	1															
g. Films; Screens; Darkroom and Developing	Physical properties of the x-ray film; characteristics and use of screens; construction, and equipment of the darkroom; technique of developing, fixing, washing, drying; problems to be encountered in warm dry climates.	TM 8-240, pp. 50-55, 60-62	C, D	(1)	1															
h. Dental X-ray Film	Types and kinds of dental x-ray films.	TM 8-225, par. 96-100	C, D	(1)	1															
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Program for Dental Technicians

Technical

Detailed Program (Cont'd) *See pp. 16, 17*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8. (Cont'd)																				
1. Angulation and Exposure	Principles of angulation and the average angles for individual teeth; exposure time.	TM 8-225, Ch. 4, Sec. II	C, D	(1)		1														
3. Demonstration & Application	Demonstration and practice in taking dental x-ray; placing of films, exposure and processing.	TM 8-225, Ch. 4, Sec. II, III, IV.	D, AE	(2)		3														
9. Dental Hygiene				6																
a. Structures of Mouth and their Diseases	Review structures of the mouth and teeth; theories of mechanism of caries; common diseases including periodontoclasia, Vincent's Stomatitis and other common stomatitis.	TM 8-225, Ch. V, pp. 139-170; (Mouth Hygiene, Jones, Ch. 2, 6, 7, 8.)	C, D	(2)		2														
b. Deposits and Accretions on the Teeth	Theory of deposition of calculus on the teeth; cause of maculopigment and green stain.	TM 8-225, par. 156, 158-162 (Jones, Ch. 6.)	C, D	(2)		2														
c. Dental Prophylaxis	Purpose and technique of dental prophylaxis.	TM 8-225, Ch. 5	C, D	(2)		2														
10. Chair Assisting				14																
a. Duties of Chair Assisting	Regulates of an assistant; care of clinic and equipment; duties at the chair and the daily routine.	TM 8-225, Ch. 6, Sec. 1, 2, 5, 6.	C, D	(1)		1														
b. Sterilization and Care of Instruments	Purpose and technique of sterilization of instruments; care of instruments with emphasis on the problems of the care of burs.	TM 8-225, par. 175-181	C, D	(1)		1														
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Dental Technicians

Technical

*Detailed Program (Cont'd) See page 86*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
10. (Cont'd)																				
c. Dental Filling materials and their uses	Preparation, handling and use of amalgams, cement, silicate, zinc oxide and impression materials.	TM 8-225, Ch. 6, Sec. V	C, D	(1)			1													
Emergency Dental Treatment	Procedures to follow in first aid, both in the clinic and in the field.	TM 8-220, Ch. 3, Sec. V	C, D	(1)			1													
e. Care of Dental Equipment	Care of the unit; chair; instruments; engines and hand pieces. Assembly and dismantling equipment in MD Chest #60; familiarization with contents of chest 60.	TM 8-225, Ch. 6, Sec. V	C, D, AE	(3)			3													
f. Assisting at the Chair	Practical instruction in chair assisting.	All previous references on chair assisting.	D, AE	(7)			7													
11. Inlays, Crowns and Bridges				36																
	General considerations in the construction of inlays, crowns and bridges; purpose of each; technique for construction of full gold crown, direct method.	TM 8-225, par. 63-67	C, D	(1)			1													
b. Dental Casting	History and development of dental casting; theory of mold expansion.	TM 8-225, par. 59, 60, 61 (Hodgen-Shell, Ch. 15.)	C, D	(1)			1													

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Program for Dental Technicians

Technical

Detailed Program (Cont'd) *Rev. 7-19-66*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
11. (Cont'd)																				
c. Cast gold crown and other restorations by indirect method	Technique of making dies, waxing the crown and casting; technique of making a three-quarter crown.	TM 8-225, par. 63-67	C, D	(1)			1													
d. Technique of Dental Casting	Wax pattern, spruing, investing, wax eliminations, melting metal, casting, acid pickles finishing.	TM 8-225, par. 63-67	C, D	(2)			2													
e. Construction of fixed posterior bridge.	Preparation of cast abutment, model, dummy teeth, final assembly of bridge and finishing.	TM 8-225, par. 68-71	C, D	(1)			1													
f. Construction of anterior bridge	DO	DO	C, D	(2)			2													
g. Practical Exercise																				
(1) Posterior Bridge	Actual practice in construction of posterior bridge.	DO	AE	(14)			10	4												
(2) Anterior Bridge	Actual practice in construction of anterior bridge, fixed; inlays.	DO	AE	(14)			14													
12. Impressions				6																
a. Impressions & Casts	Plaster, modeling, compound and hydrocolloid impressions and boxing them.	TM 8-225, par 18-22 (Complete Dentures, Swenson, Ch. 1 2, 3)	C, D	(1)			1													
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Dental Technicians

Technical

Detailed Program (Cont'd) *due to the 81*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
12. (Cont'd)																				
b. Base Plates, Denture Bases, Bite Rims and Records	Technique of adaptation of base plate, making of bite rims and the records they give.	TM 8-225, Ch. 3, Sec. VI. (Swenson, Ch. 3, 5, 30)	C, D	(1)					1											
Articulator	Use of the articulator; mounting casts; manipulation of articulator.	TM 8-225, Ch. 3, Sec. VI. (Swenson, Ch. 28)	C, D, AE	(2)					2											
d. Selecting Artificial Teeth	Facial characteristics; types of teeth, and the various shades and mold.	TM 8-225, Ch. 3, Sec. VI (Swenson, Ch. 30)	C, D, AE	(2)					2											
13. Clamps				27																
a. Support Retainers and Clamps	Types of rests, supports and clamps; advantages and disadvantages of cast and wrought clamps.	TM 8-225, Ch. 3, par. 74-77 (Wey's Surveyor Book)	C, D	(1)					1											
b. Principles & Mechanics of Surveying	Models, steps of survey, retention, undercuts, tripoding and duplicating model, path of insertion, rules for tilting, guide line; analysis and classification of clamps, connectors, and bar constructing.	TM 8-225, par. 80-88 (Wey's Surveyor Book)	C, D	(3)					3											
c. Practical Exercise	Assembly and construction of bar with three clamps.	DO	AE	(23)					8	15										
14. Full Dentures				137																
a. Introduction	Introduction and outline of full denture construction.	TM 8-225, Ch. 3, Sec. I	L	(1)						1										
TRAINING PROGRAM FORM 56-428, AUG 10 1943																				



## Program for Dental Technicians

## Technical

Detailed Program (Cont'd) *See par. 8 L*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
14. (Cont'd)																				
b. Base Plates, Bite Rims, Mounting of Casts	Technique of making base plates, bite rims and mounting casts on articulators.	TM 8-225, Ch. 3, Sec. VI. (Complete Dentures, Svenson, Ch. 5, 6)	C, D	(2)					2											
Practical Exercises	Practice in making base plates and bite rims and mounting casts on articulators.	DO	AE	(40)					18	22										
d. Setting up Teeth	Methods and rules to follow in the setting up of teeth.	TM 8-225, Ch. 3, par. 33-39 (Svenson, Ch. 7)	C, D	(1)						1										
e. Temporo- Mandibular Articulation, balanced occlusion, waxing and preparing casts for flasking.	Effect of temporo-mandibular artic- ulation, necessity of balanced occlusion and methods to obtain this balance; waxing.	TM 8-225, par. 40 (Svenson, Ch. 9)	C, D	(1)						1										
f. Flasking, Packing, Processing	Procedure of flasking; separating and packing flasks; processing various materials.	TM 8-225, par. 43 (Svenson, Ch. 9)	C, D	(1)						1										
g. Finishing	Procedure of finishing dentures, remounting, milling.	TM 8-225, par 43- 50 (Svenson, Ch X)	C, D	(1)						1										
h. Practical Exercise	Arranging and articulating a mini- mum of four additional set-ups.	TM 8-225, par. 33-44.	AE	(40)						10	30									
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Dental Technicians

Technical

Detailed Program (Cont'd) *also in Part II*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
14. (Cont'd)																				
1. Construction of Single Denture	Outline for construction of a single denture against natural teeth.	(Swenson, Ch. 40)	C, D	(1)								1								
Duplicating Dentures	Procedure to follow in duplicating dentures.	(Swenson, Ch. 34)	C, D	(1)								1								
k. Rebasing Dentures	Procedure for rebasing dentures.	(Swenson, Ch. 37)	C, D	(1)								1								
1. Practical Exercise																				
(1) Full Upper Construction	Practice in construction of full upper in acrylic against natural lowers; duplicating dentures.	Previous References on full dentures.	AE	(33)								3	30							
(2) Finishing	Completion of full upper denture in acrylic.	DO	AE	(14)									6	8						
15. Partial Dentures																				
a. Introduction	Introduction to partial denture construction; purpose; support and retention.	TM 8-225, Ch. 3, Sec. XIV.	L, D	(1)													1			
b. Flask Preparation	The flask preparation, investing in flask, heating, separating and wax elimination.	TM 8-225, par 45.	C, D	(1)													1			
c. Vulcanization	The vulcanizer, packing and technique of vulcanization.	TM 8-225, par. 44-45	C, D	(1)													1			
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				



## Program for Dental Technicians

## Technical

Detailed Program (Cont'd) *See III, para 3, 0*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
15. (Cont'd)																				
d. Finishing	Procedure of finishing; polishing of dentures; repair.	TM 8-225, Ch. 3, Sec. VIII	C,D	(1)														1		
e. Practical Exercise	Actual construction of upper partial; repair of upper partials.	Previous references AE on partial dentures.	AE	(29)														24	5	
f. Objectives of Partial Denture Design	The objectives of partial denture design, principles for surveying partial dentures, nomenclature.	TM 8-225, par. 72	C,D	(1)														1		
g. Dental Soldering	Principles and technique of dental soldering.	(Key's Gold Book, pp. 16-17)	C,D	(1)														1		
h. Surveying Lower Partial																				
(1) Technique	The technique of surveying lower partials; cast and construction of contoured clasps and bar.	TM 8-225, par. 72-85	C,D	(2)														2		
Practical Exercise	Practice in surveying lower partials; cast and construction of contoured clasps and bar.	DO	AE	(15)														15		
1. Injuries from faulty denture	The various possible injuries from faulty denture construction; corrective measures and prevention.	NONE	C,D	(1)														1		
j. Lower Partial																				
(1) Technique	Assembly and construction of partial lower, 3 clasps and bar.	TM 8-225 par. 72 &	D	(1)														1		
TRAINING PROGRAM	FORM SG 428, AUG 10 1943																			

Technical

Detailed Program (Cont'd) *par. 84*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
15j. (Cont'd)																				
(2) Practical Exercise	Practice in assembly and construction of partial lower, 3 clasps and bar.	DO	AE	(28)										10	18					
k. Surveying and Construction	Surveying partial upper and partial lower; constructing seven contoured clasps, lower bar case, full palate upper.	TM 8-225, Ch. 3, par. 72-78	AE	(26)											18	8				
16. Fractures & Splints				28																
a. Classification	Classification and types of fractures of maxilla and mandible; types of splints; advantages and disadvantages; indications for use.	TM 8-225, par. 94-97	C,D	(1)												1				
b. First Aid Treatment	First aid treatment of fractures of maxilla and mandible; construction of acrylic splints.	TM 8-225, par. 94-97	C,D	(2)												2				
c. Acrylic Splints	Construction of acrylic splints, for the various types of fractures.	TM 8-225, Ch. 3, Sec. XV	AE	(25)												25				
17. Time Reserved for the Commandant				24	2	2	2	2	2	2	2	2	2	2	2	2				
TOTAL HOURS				456	38	38	38	38	38	38	38	38	38	38	38	38				
TRAINING PROGRAM	FORM SG 428, AUG 10 1943																			



## Program for Laboratory Technicians

Summary Program *par. 9a*

## Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<u>TECHNICAL</u>																				
4. General Laboratory Information	To familiarize the student with the purpose and scope of the course, laboratory reports, supply and the metric system.	TM 8-220; TM 8-227; Medical Supply Catalogue (Clinical Diagnostics by Laboratory Methods, Todd and Sanford, 10th. Ed.)	L, C, D	15	15															
5. Hematology	To train the student in the fundamental principles of hematology.	TM 8-227; (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th. Ed.)	L, D, C, AE	82	21	36	25													
6. Chemistry	The fundamentals of inorganic and organic chemistry in relation to laboratory procedures.	TM 8-227; TM 8-233; (General Chemistry; Smith and Kendall, 1936; Organic Chemistry, Conant, 1936)	L, C, D, AE	45			11	34												

TRAINING PROGRAM FORM SG 428, AUG 10 1943

**Program for Laboratory Technicians**

**Technical**

Summary Program (Cont'd) *See III, Sec. 1a.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. PRESEN. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
7. Urinalysis	The anatomy and physiology of the urinary system and the laboratory examination of urine.	TM 8-220; TM 8-227; (Physiology and Anatomy, Greishelmer; Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed.)	L, C, D, AE	45				2	30	13								
Gastric Analysis	Routine methods for collecting and analyzing gastric contents.	TM 8-220; 8-227; (Physiology & Anatomy, Greishelmer; Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed.)	L, C, D, AE	12				6	6									
9. Blood Chemistry	To familiarize the student with the normal and abnormal chemical constituents of the blood and the routine and special laboratory tests.	TM 8-227; (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed.)	L, C, D, AE	60				17	36	7								
10. General Bacteriology	To acquaint the student with the general characteristics of bacteria, including preparation of culture media and methods of staining bacteria.	TM 8-227; (Text- L, C, D, book of Bacteriology, Rice, 2nd. Ed.)	L, C, D, AE	24							24							
11. Bacteria of Medical Importance	To study the various genera of bacteria of medical importance, general classification of bacteria, fungi, rickettsia and viruses.	TM 8-227; (Text- L, C, D, book of Bacteriology, Rice, 2nd. Ed.)	L, C, D, AE	131								5	36	36	36	18		

TRAINING PROGRAM FORM SG 428, AUG 10 1943





Program for Laboratory Technicians

Technical

Detailed Program (Cont'd) *PAR. 9A*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
					15	16	17	18	19	20	21	22	23	24	25	26	27	28
4. General Laboratory Information																		
a. Introduction	Purpose and scope of the course; method of instruction; duties of laboratory technicians; test for color perception.	None	I, C	(2)	2													
b. Reports and Forms	Purpose; preparation; importance of laboratory reports and forms.	TM 8-227, par. 6-8	I, D, AE	(3)	3													



## Program for Laboratory Technicians

## Technical

## Detailed Program (Cont'd)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
c. Laboratory Supply	Introduction; accountability and responsibility; expendable and non-expendable items; standard and non-standard items; Med. Supply Catalogue; transfer of property; regulations.	TM 8-220, par. 309, 319; 8-227, par. 3-5; Medical Supply Catalogue	C.D	(3)	3													
d. Metric System	The metric system of weights and measures and its application in the laboratory.	TM 8-233, par. 5. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed. p. 845.)	C.D	(3)	3													
e. Specific Gravity	Definition; method of measurement; importance in laboratory procedures.	TM 8-227, par. 62; TM 8-233, par. 11-15. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed. p. 70)	C.D	(2)	2													
f. Centigrade & Fahrenheit	The centigrade and Fahrenheit scales; conversion of one to the other.	TM 8-233, par. 6, 9, 18.	C.D	(2)	2													
5. Hematology				82														
a. Microscope; hemoglobinometer; hemacytometer	Structure, use and care of microscope, hemoglobinometer and hemacytometer.	TM 8-227, par. 9-12, 23, 24. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed. pp 1-29, 209-216, 218-228)	C.D	(4)	4													

Program for Laboratory Technicians

Technical

Detailed Program (Cont'd) *See page 9*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5. (Cont'd)																				
b. Hemoglobin & Red Blood Cells																				
(1) General	Characteristics; function; appearance under microscope; immature forms; hemoglobin and method of determination, importance, average normals; procedure in doing red cell counts, average normal counts, significance of variations.	TM 8-227, par. 23-24. (Clinical Diagnosis of Laboratory Methods, Todd & Sanford, 10th. Ed., pp. 205-228.)	C, D	(2)	2															
(2) Laboratory Exercise	Practice in determination of hemoglobin and doing red cell counts.	DO	AE	(17)	13	4														
c. Anemias	The anemias; types; causes; signs symptoms; treatment; laboratory methods in diagnosis.	TM 8-227, par. 23-25. (Clinical Diagnosis of Lab. Methods, Todd & Sanford, 10th Ed. pp. 205-228, 297-316; Biochemistry of Disease, Bodansky & Bodansky, pp. 1-46.)	I, C	(2)	2															
d. White Blood Cells																				
(1) General	Types; characteristics; function; appearance under microscope; immature forms; average normal counts; normal differentials; shifting index; procedure for doing white count, differential, and shifting counts; significance of variations from the normals.	TM 8-227, par. 26-32. (Clinical Diagnosis of Lab. Methods, Todd & Sanford, 10th Ed. pp. 235-243; 264-285)	C, D	(3)	3															
TRAINING PROGRAM FORM 56 428, AUG 10 1943																				
43-44555 28																				

TRAINING PROGRAM



## Program for Laboratory Technicians

## Technical

Detailed Program (Cont'd) *Sheet No. 9d*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5. (Cont'd)																				
(2) White Counts (Laboratory Exercise)	Practice in doing white blood counts.	DO	AE	(15)		15														
(3) Differential Counts (Laboratory Exercise)	Practice in doing differential white blood counts.	DO	AE	(18)		14	4													
(4) Schilling Index (Laboratory Exercise)	Practice in doing Schilling counts.	DO	AE	(8)		8														
e. Sedimentation Rate	Purpose: methods, normals and significance of variations from normal in sedimentation rates.	TM 8-227, par. 39. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed. p. 329.)	C,D,AE	(2)		2														
d. Bleeding Time	Purpose: methods; normal values; significance of variations from the normal.	TM 8-227, par. 36. (Clinical Diagnosis of Laboratory Methods, Todd & Sanford, 10th Ed., p. 203.)	C,D,AE	(2)		2														
c. Coagulation Time	Purpose: methods; normal values; significance of variations from the normal.	TM 8-227, par. 35. (Clinical Diagnosis of Laboratory Methods, Todd & Sanford, 10th Ed., p. 197)	C,D,AE	(2)		2														
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Laboratory Technicians

Technical

Detailed Program (Cont'd) See IV, para 14.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5. (Cont'd)																				
h. Platelet and Reticulocyte Counts	Purpose; methods, normal values; significance of variations from the normal in platelet and reticulocyte.	TM 8-227, par. 33, 34	C, D, AE	(4)			4													
Fragility Test	Purpose; procedure; normal value; significance of variations from the normals.	(Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed. p. 327)	C, D	(1)			1													
j. Venipuncture	The accepted technique for doing a venipuncture.	TM 8-227, par. 40	C, D, AE	(2)			2													
45																				
6. Chemistry																				
a. Elementary Inorganic Chemistry																				
(1) General	Scope; definitions; fundamental laws of matter.	TM 8-233, par. 34-43. (General Chemistry, Smith & Kendall, 1936, pp. 13-67)	L, C	(1)			1													
(2) Elements	Definitions, classification; symbols and atomic weights of the elements.	TM 8-233, par. 43.	C	(2)			2													
(3) Formulae	Chemical formulae; molecular weight and percentage composition; valence; structural formulae; radicals.	TM 8-233, par. 44-50. (General Chemistry, Smith & Kendall, 1936, Ch. 5.)	C	(3)			3													
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				



## Program for Laboratory Technicians

## Technical

Detailed Program (Cont'd) *See par. 4d*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
(4) Chemical Nomenclature	Naming of chemicals; common prefixes; term referring to valence.	TM 8-233, par. 50	C	(1)				1												
(5) Acids, Bases and Salts	Structure; properties; uses, and reactions of the acids, bases and salts; include chemical change.	TM 8-233, par. 51-56. (General Chemistry, Smith and Kendall, 1936, Ch. 17a)	C	(4)			4													
b. Volumetric Solutions																				
(1) Volumetric Glassware	The various types, their use and care.	TM 8-227, par. 44	C,D	(1)				1												
(2) Indicators	Purpose; use; characteristics of the commonly used indicators.	TM 8-227, par. 47-50	C,D	(1)				1												
(3) Molar and Normal Solutions	Definitions; use; procedure for preparation of standard solutions.	TM 8-227, par. 50-52. (General Chemistry, Smith & Kendall, 1936, p. 181.)	C,D	(2)				2												
(4) Titrations (Laboratory Exercise)	Practice in actual preparation of standard solutions.	TM 8-227, par. 51	AE	(14)				14												
c. Elementary Organic Chemistry																				
(1) Introduction	Definitions; classification of organic compounds; difference between organic and inorganic chemistry.	TM 8-233, par. 56-58	C,D	(1)				1												
TRAINING PROGRAM FORM 36 428, AUG 10 1943																				

# Program for Laboratory Technicians

## Technical

Detailed Program (Cont'd) *Sec. III, Para. 2, d.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
c. (Cont'd)																				
(2) Hydrocarbons; Alcohols; Aldehydes	Definitions; occurrence; importance and uses of the hydrocarbons, alcohols and aldehydes.	TM 8-233, par. 58. (General Chemistry, Smith & Kendall, 1936, Ch. 32; Organic Chemistry, 1936, Conant, Ch. 1, 3, 4, 7)	C, D	(2)					2											
(3) Ketones; Acids	Definitions; occurrence; importance and uses of the ketones and acids.	TM 8-233, par. 58. (Organic Chemistry, Conant, 1936, Ch. 5, & 7)	C, D	(2)					2											
(4) Esters; Ethers	Definitions; occurrence; importance and uses of the esters and ethers.	TM 8-233, par. 58. (Organic Chemistry, Conant, 1936, Ch. 6)	C, D	(2)					2											
(5) Carbohydrates	Definition; occurrence; importance and use of the carbohydrates.	TM 8-233, par. 58. (Organic Chemistry, Conant, 1936, Ch. 12)	C, D	(2)					2											
(6) Aromatic Compounds	Definitions; classification; occurrence, importance and use of the aromatic compounds.	TM 8-233, par. 58. (Organic Chemistry, Conant, 1936, Ch. 16-19)	C, D	(4)					4											
(7) Alkaloids	Definitions, occurrence, importance and use of the alkaloids.	TM 8-233, par. 58	C, D	(2)					2											

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Laboratory Technicians

Technical

Detailed Program (Cont'd) *See III, page 31*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
(8) Miscellaneous Organic Compounds	The more common compounds containing elements in addition to carbon, hydrogen, oxygen and nitrogen; their occurrence and use.	TM 8-233, par. 58	G, D	(1)					1											
7. Urinalysis					45															
a. Anatomy and Physiology of the Urinary System	Structure and function of the kidneys, ureters, bladder and urethra.	TM 8-220, par. 52. (Physiology & Anatomy, Grisholmer, Ch.17,18)	L, C, D	(2)					2											
b. Urine Analysis																				
(1) Physical Properties	Examination of color, appearance, reaction, specific gravity, quantity, total solids in urine.	TM 8-227, par. 59-65. (Clinical Diagnosis by Lab. Methods, Todd & Sanford, 10th Ed. pp. 63-73.)	G, D	(1)					1											
Qualitative Chemical Examination	Examinations for albumin, glucose, indican, acetone, aceto-acetic acid, bile pigments, urobilinogen, and blood in urine.	TM 8-227, par. 65-73. (Clinical Diagnosis by Lab. Methods, Todd & Sanford, 10th Ed. pp. 87-126.)	G, D	(4)					4											
(3) Quantitative Chemical Examination	Quantitative determination of albumin, urea nitrogen, glucose.	TM 8-227, par. 77-84	G, D	(1)					1											
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				



Program for Laboratory Technicians

Technical

Detailed Program (Cont'd) *disc. III, par. 5d.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7. (Cont'd)																				
(4) Microscopic Examination	Microscopic examination of urinary sediments; casts; cylindroids; pus cells; red cells; epithelial cells; spermatozoa; crystals.	TM 8-227, par. 13-17. (Clinical Diagnosis by Lab. Methods, Todd & Sanford, 10th Ed. pp. 126-161.)	C, D	(4)						4										
c. Glycosuria	Causes, significance, procedures for determining presence of glucose in the urine.	TM 8-227, par. 66, 68, 69. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed. pp. 96-105; Physiology and Anatomy, Greishelmer, p. 571)	C	(1)						1										
d. Kidney Function Tests	The various tests for kidney function; procedure for carrying them out; stress urea clearance and total non-protein nitrogen.	TM 8-227, par. 101-103. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed. pp. 172-176, 363)	C, D	(2)						2										
e. Urinalysis (Lab Exercises)	Practice in doing routine urinalysis.	DO	AE	(30)						17	13									
8. Gastric Analysis																				
a. Anatomy and Physiology of the stomach	Structure and function of the stomach.	TM 8-220, par. 49; 8-227, par. 84. (Anatomy & Physiology, Greishelmer, p. 492, 531)	L, C	(1)						1										
TRAINING PROGRAM	FORM SG 428, AUG 10 1943																			

Program for Laboratory Technicians

Technical

Detailed Program (Cont'd) *see p. 2, 3, 4*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8. (Cont'd)																				
b. Test meals	Purpose, kinds, method of administration of test meals; removal of gastric contents.	TM 8-227, par. 87-90	C, D	(2)						2										
c. Characteristics of Gastric Contents	Amount, color, layering, odor, microscopic elements, and chemical analysis of gastric contents.	TM 8-227, par. 84-87, 90-95. (Clinical Diagnosis by Lab. Methods, Todd & Sanford, 10th Ed. Ch. 5.)	C, D	(3)						3										
d. Gastric Analysis (Lab. Exer.)	Practice in doing macroscopic, microscopic and chemical examination of gastric contents.	DO	AE	(6)						6										
9. Blood Chemistry																				
a. Introduction	Purpose and scope of the course; accuracy; precautions.	NONE	I	(1)						1										
Protein-free filtrate	Use; procedure to be followed in the preparation of protein-free blood filtrate.	TM 8-227, par. 100. (Clinical Diagnosis by Lab. Methods, Todd & Sanford, 10th Ed. pp. 361-363)	D, AE	(4)						4										
c. Colorimetry	The types; purpose and procedure in use of the colorimeter; collection of blood specimens for analysis.	TM 8-227, par. 95-100. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed. pp. 347-353.)	C, D	(2)						2										

TRAINING PROGRAM FORM SG 428, AUG 10 1942

Program for Laboratory Technicians

Technical

Detailed Program (Cont'd) *dec. III, par. 9b*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
9. (Cont'd)															
d. Blood Glucose	Procedures for determination; normal values; significance of variations from the normal.	TM 8-227, par. 106	C,D	(1)						1					
Determination of Blood Glucose (Laboratory Exercise)	Practice in the procedure of determining blood sugar.	TM 8-227, par. 106. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed., pp. 387-397.)	AE	(7)						5	2				
f. Carbohydrate Tolerance	Procedure; normal curves; significance of variations from the normal; practical application on procedures.	TM 8-227, par. 107	C,D,AE	(4)						4					
e. Icteric Index	Procedure; normal values; significance of variations from the normal.	TM 8-227, par. 113	C,D	(1)						1					
Plasma Proteins	Procedure for determination; normal values; significance of variations from the normal; practical application on procedures.	TM 8-227, par. 114	C,D,AE	(4)						4					
1. Non-Protein Nitrogen.															
(1) Techniques	Procedures for determination; normal values; significance of variations from the normal.	TM 8-227, par. 101	C,D	(1)						1					



## Program for Laboratory Technicians

## Technical

Detailed Program (Cont'd) *Continued from p. 63*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
91. (Cont'd)																				
(2) Determination of NPN (Laboratory Exercise)	Practice in the procedure of determining total non-protein nitrogen.	DO	AE	(7)								7								
v. Urea Nitrogen & Urea Clearance																				
(1) Techniques	Procedures for determination; normal values; significance of variations from the normal.	TM 8-227, par. 102-103	C,D	(1)								1								
(2) Determination of Urea Nitrogen & Urea Clearance. (Lab. Exer.)	Practice in the procedures of determining urea nitrogen and urea clearance.	DO	AE	(7)								7								
k. Calcium and Uric Acid																				
	Procedures for determination; normal values; significance of variations from the normal; practical application on procedures.	TM 8-227, par. 105-112	C,D,AE	(4)								4								
l. Chlorides & Sulfonamides																				
(1) Technique	Procedures; normal values; significance of variations from the normal.	TM 8-227, par. 108, 118. (Clinical Diagnosis by Lab. Methods, Todd & Sanford, 10th Ed., pp. 440-444.)	C,D	(1)								1								
TRAINING PROGRAM	FORM SG 428, AUG 10 1943																			

Program for Laboratory Technicians

Technical

Detailed Program (Cont'd) *See III, para 9d*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
91. (Cont'd)																				
(2) Determination of Blood Chlorides & Sulfonamides (Lab. Exer.)	Practice in the determination of blood chlorides and sulfonamides.	DO	AE	(5)							5									
m. Creatinine; Ethyl and Alcohol; Alkali Reserve	Procedures; normal values; significance of variations from the normal; practical application on procedures.	TM 8-227, par. 104, 115, 117	C,D,AE	(3)							3									
n. Spinal Fluid																				
(1) Technique	Procedure for determination of sugar and alcohol in spinal fluid; normal values; significance of variations from normal.	TM 8-227, par. 106, 117	C,D	(1)								1								
(2) Determination of Spinal Fluid Sugar and Alcohol (Lab Exer.)	Practice in determination of sugar and alcohol in spinal fluid.	DO	AE	(6)								6								
30. General Bacteriology																				
a. Introduction	Introduction to bacteriology and bacteriological technique; the history of bacteriology; bacteriology of everyday life; importance in medical progress.	(Textbook of Bacteriology, Rice, 2nd. Ed., pp. 1-41.)	I	(1)									1							
TRAINING PROGRAM FORM 56 426, AUG 10 1943																				

## Program for Laboratory Technicians

## Technical

Detailed Program (Cont'd) *disc. in par. 7b*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
10. (Cont'd)																				
b. General Characteristics of Bacteria	Morphology, motility, staining, growth and reproduction, conditions of growth; morphology of colonies, ability to produce disease.	TM 8-227, Ch. 7, Sec. 1. (Textbook of Bacteriology, Rice, 2nd Ed., Ch. 4-8.)	C,D	(4)									4							
c. Destruction of Bacteria	The effects of chemical and physical agents on bacteria.	TM 8-227, par. 130-135. (Textbook of Bacteriology, Rice, 2nd Ed., Ch. 8&9.)	C,D	(2)									2							
d. Preparation of Culture Media																				
(1) General	The purpose, types, and methods of preparation of culture media, nutrient broth, nutrient agar, blood agar, sugar broths.	TM 8-227, par. 163-214	C,D	(2)									2							
(2) Preparation (Lab. Exer.)	Practice in the preparation of culture media.	DO	AE	(12)									12							
e. Staining & Staining Solutions	Purpose, characteristics, methods of use; stability under different conditions of climate of the common stains.	TM 8-227, par. 229-230	C,D	(3)									3							
11. Bacteria of Medical Importance				131																
TRAINING PROGRAM	FORM SG 428, AUG 10 1943																			



Program for Laboratory Technicians

Technical

Detailed Program (Cont'd) *See p. 94*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
11. (Cont'd)																				
a. General	Study of the various genera of bacteria of medical importance; general considerations; classification of bacteria; higher bacteria; fungi; rickettsia; viruses and protozoa.	TM 8-227, par. 258-263	L, C, D	(4)								4								
b. Staphylococci																				
(1) Characteristics of the group	Habitat; morphology; staining and culture characteristics; lesions produced.	TM 8-227, par. 265. (Textbook of Bacteriology, Rice, 2nd Ed., Ch. 13.)	C, D	(1)								1								
(2) Laboratory Exercise	Identification and culture of staphylococci.	DO	AE	(6)								6								
c. Streptococci																				
(1) Characteristics of the group	Habitat; morphology; staining and culture characteristics; lesions produced.	TM 8-227, par. 266. (Textbook of Bacteriology, Rice, 2nd Ed., Ch. 14.)	C, D	(1)								1								
(2) Laboratory Exercise	Identification and culture of streptococci.	DO	AE	(6)								6								
d. Pneumococci																				
(1) Characteristics of the group	Habitat; morphology; staining and culture characteristics; lesions produced; typing.	TM 8-227, par. 267	C, D	(1)								1								
TRAINING PROGRAM FORM 36 428, AUG 10 1943																				

TRAINING PROGRAM FORM SG 428, AUG 10 1943

## Program for Laboratory Technicians

## Technical

Detailed Program (Cont'd) *See p. 76*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
11d. (Cont'd)															
(2) Laboratory Exercise	Identification, culture and typing of pneumococci.	DO	AE	(4)								4			
e. <i>Neisseria</i>															
1) Characteristics of the group	Habitat; morphology; staining and culture characteristics; lesions produced.	TN 8-227, par. 268-271	C, D	(1)								1			
(2) Laboratory Exercise	Identification and culture of <i>neisseria</i> .	DO	AE	(8)								8			
f. <i>Colon-Typhoid Group</i>															
(1) Characteristics of the group	Habitat; morphology; staining and culture characteristics; lesions produced by the group; <i>S. Coli</i> and <i>A. Aerogenes</i> in detail.	TN 8-227, par. 287-289. (Textbook of Bacteriology, Rice, 2nd Ed., Ch. 19-22.)	C, D	(1)								1			
(2) Laboratory Exercise	Identification and culture of <i>S. Coli</i> and <i>A. Aerogenes</i> .	DO	AE	(4)								4			
g. <i>S. Typhi</i>															
(1) Characteristics	Habitat; morphology; staining and culture characteristics; lesions produced. Typhoid fever; carriers; transmission; prevention. <i>Widal Test</i> .	TN 8-227, par. 295. (Textbook of Bacteriology, Rice, 2nd Ed., Ch. 20.)	C, D	(1)								1			
(2) Laboratory Exercise	Identification and culture. <i>Widal Test</i> .	DO	AE	(6)								3	3		

Program for Laboratory Technicians

Technical

Detailed Program (Cont'd) *Ann. 11, par. 4a*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
11. (Cont'd)																				
h. Shigella																				
(1) Characteris- tics of the Group	Habitat; morphology; staining and culture characteristics; lesions produced.	TM 8-227, par. 297-300	C,D	(1)											1					
(2) Laboratory Exercise	Identification and culture of the Shigellae.	DO	AE	(6)											6.					
i. Salmonella																				
(1) Characteris- tics of the Group	Habitat; morphology; staining and culture characteristics; lesions produced; agglutinations.	TM 8-227, par. 297, (Textbook of Bacteriology, Rice, 2nd Ed., p. 208)	C,D	(1)											1					
(2) Laboratory Exercise	Identification and culture of Salmonella; agglutinations.	DO	AE	(9)											9					
j. Hemophilus																				
(1) Characteris- tics of the Group	Habitat; morphology; staining and culture characteristics; lesions produced.	TM 8-227, par. 281-286	C,D	(1)											1					
(2) Laboratory Exercise	Identification and culture of Hemophilus Group.	DO	AE	(4)											4					
k. Cholera																				
	Habitat, cultivation, morphology, pathogenicity and epidemiology of V. Cholerae.	TM 8-227, par. 300	C,D	(1)											1					

TRAINING PROGRAM FORM SG 426, AUG 10 1943





Program for Laboratory Technicians

Technical

Detailed Program (Cont'd) *See p. 24*

SUBJECT	SCORE	TEXT REFERENCE	METHOD OF PRESERVATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P. (Cont'd)																				
(2) Laboratory Exercise	Investigation program for an outbreak.	DO	AE	(6)																
g. Acid-Fast Group																				
(1) Characteristics of the group	Habitat; morphology; staining and culture characteristics; lesions produced.	IM 8-227, par. 307 & 308. (Text-book of Bacteriology, Rice, 2nd Ed., pp. 265-282.)	C.D	(2)																
(2) Laboratory Exercise	Identification and culture of acid-fast group.	DO	AE	(12)																
r. C. Diphtheriae																				
(1) Characteristics	Habitat; morphology; staining and culture characteristics; rapid culture; lesions produced; toxin and anti-toxin; Schick test; preventive measures for diphtheria. Diphtheroids.	IM 8-227, par. 306	C.D	(1)																
(2) Laboratory Exercise	Identification and culture of the organism.	DO	AE	(4)																
s. Rickettsia Group	Habitat; morphology; staining and culture characteristics; lesions produced; Weil-Felix reaction.	IM 8-227, par. 376-384	C.D	(1)																
t. Viruses	General characteristics, classification, cultivation, pathogenicity.	IM 8-227, par. 385-395	C.D	(1)																
TRAINING PROGRAM FORM 38 424, AUG 10 1942																				

TRAINING PROGRAM FORM 38 424, AUG 10 1962

## Program for Laboratory Technicians

Detailed Program (Cont'd) *See pgs. 9-12*

## Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Program for Laboratory Technicians

Technical

Detailed Program (cont'd) *dec. 11, 1943*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
12. Bacteriological Examination of Water and Milk				16																
a. Water																				
1) General	Purpose; collection of samples; required equipment; required tests.	TM 8-227, par. 366-372	L, C, D	(2)														2		
(2) Laboratory Exercise	Practice in bacteriological examination of water.	DO	AE	(6)														6		
b. Milk																				
(1) General	Definitions; grading and standard tests for milk, cream and ice cream.	TM 8-227, par. 373-375	C, D	(2)														2		
(2) Laboratory Exercise	Practice in bacteriological examination of milk, cream, & ice cream.	DO	AE	(6)														6		
13. Serology				40																
1. Introduction	Definition; types of reactions; application, history of syphilis.	TM 8-227, par. 406. (Clinical Diagnosis by Lab. Methods, Todd & Sanford, 10th Ed. pp. 669-753.)	L, C	(2)														2		
b. Standard & Quantitative Kahn Tests (Laboratory Exercise)	Technique for the standard and quantitative Kahn Tests and practice in performing both.	TM 8-227, par. 407-408	C, D, AE	(17)														17		
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				



Program for Laboratory Technicians

Detailed Program (Cont'd) *See III, para 7d*

Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
15. Parasitology				80																
a. Malarial Parasites																				
(1) Types and Life Cycle	Types; life cycles; laboratory diagnosis of malaria; thin smears; thick smears; combined thick and thin smears.	TM 8-227, par. 430-439. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed. pp. 525-536.)	I, C, D	(4)														4		
(2) Laboratory Exercise	Practice in making blood smears; examination of smears; and identification of malarial parasites.	DO	AE	(24)														20	4	
b. Intestinal Amoebae																				
(1) Characteristics	Morphology; collection of specimens; staining; culture methods; confusing objects.	TM 8-227, par. 416-425. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed. pp. 498-509.)	C, D	(4)														4		
(2) Laboratory Exercise	Practice in identification, staining and culture of amoebae.	DO	AE	(10)														10		
c. Blood and Tissue Flagellates & Ciliates																				
TRAINING PROGRAM FORM 36 428, AUG 10 1943																				



Program for Laboratory Technicians

Technical

Detailed Program (Cont'd) *See page 9*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
c. (Cont'd)																				
(1) Characteristics	Morphology; habitat; life cycles; identification; culture; of <i>L. giardia</i> , <i>balantidium</i> , <i>leishmania</i> , <i>trypanosoma</i> , <i>trichomonas</i> , etc.	TM 8-227, par. 426-429. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed., pp. 509-523, 536)	C, D	(4)														4		
(2) Laboratory Exercise	Practice in identification of the flagellates and ciliates.	DO	AE	(14)														14		
d. Helminthes																				
(1) Characteristics	Classification; morphology; habitat; important pathogenic species; methods of examination for platyhelminthes and nemathelminthes.	TM 8-227, par. 440-455. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed., pp. 537-577.)	C, D	(2)														2		
e. Laboratory Exercise																				
(1) Characteristics	Practice in identification of flat and round worms.	DO	AE	(8)														8		
(2) Characteristics	Characteristics; classification of the arthropods of medical importance; reasons for importance; diseases with which associated.	TM 8-227, par. 456-479. (Clinical Diagnosis by Laboratory Methods, Todd & Sanford, 10th Ed., pp. 577-586.)	C	(1)														1		
f. Arachnida of Medical Importance																				
TRAINING PROGRAM																				
FORM 56 426, AUG 10, 1943																				

## 62

Detailed Program (Cont'd) *See thru page 2*[illegible]

## Program for Laboratory Technicians

## Technical

Detailed Program (Cont'd) *par. 9b*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
16b. (Cont'd)																				
(3) Special Stains; Decalcification	The use of special stains and procedure of decalcification in preparation of specimens.	TM 8-227, par. 491-493	L, C, D	(1)															1	
(4) Laboratory Exercise	Practice in the preparation, staining and sectioning of material for microscopic examination.	All previous references on Histologic Technique.	AE	(8)															8	
17. Time Reserved for the Commandant				32	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
TOTAL HOURS				608	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Program for Medical and Surgical Technicians

Technical

Summary Program 241.10a

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<u>Technical</u> 4. Anatomy and Physiology	General structure and function of the parts of the human body.	TM 8-220; (Physiology and Anatomy, Greishelmer)	AE	35		13	10	12												
5. Emergency Medical Treatment	Basic principles of emergency medical treatment for the various types of injuries.	TM 8-5, 21-10, 21-11, 21-40, 72-20; TM 8-210, 8-220, 8-285, 8-320, 8-611; AR 40-1715; (Physiology and Anatomy, Greishelmer); TM 8-2047; 8-2049; 8-304; TS 8-31, 8-35, 8-36, 8-37, 8-41, 8-42, 8-50, 8-51	I, C, D, AE	41		10	13	8	10											

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Medical & Surgical Technicians

Technical

Summary Program (cont) Sec. III, Par. 10a

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
6. Hygiene and Prevention of Disease	Factors responsible for the development and prevention of disease.	TM 8-40, 21-10; TM 8-220, 8-227; TP 8-953; AR 40-205, 40-210, 40-215.	I, C, D, AE	29	4	4	8	3	5											
7. Public Property	Responsibility for public property.	TM 8-220; AR 35-6520, 35-6640, 40-1025, 40-1075; Med. Supply Catalog.	I, D, AE	6	4	2														
8. Ward Procedures	To train the student in the proper ward procedures.	TM 8-220, 8-260; (Principles & Practice of Nursing, Harmer & Henderson, 4th. Ed.; Textbook of Surgery, Christopher, 2nd Ed.) TP 8-1343, 1344, 1345, 1346, 1366, 1382, 1383.	I, C, D AE	69	7	12	10	8	10	11	11									
9. Mathematics	Review of simple arithmetic; metric and apothecary system.	TM 1-900, 3-233	C, D, AE	11	6		5													
10. Materia Medica	Biologicals; hypnotics; sedatives; narcotics; stimulants; cathartics; poisons; anesthetics; sulfonamides; and penicillin.	TM 8-220, 8-233; TB MED 112; (A Manual of Pharmacology, 6th. Ed., T. Soliman.)	C, D	14				3	6	5										
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Medical and Surgical Technicians

Technical

Summary Program (Cont'd) Sec. III, Par. 10a.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
11. Ward Management	Correct methods for managing a hospital ward.	TM 8-45; TM 8-220, 8-260; AR 40-590, 40-1025	I, C, D, AE	9						5	4				
12. General Training in Hospital Procedures.	To familiarize the student with general routine duties in medical and surgical wards and operating rooms of army hospitals.	TM 8-50, 21-10, 21-11; TM 8-220, 8-227; TS 8-27, 8-28, 8-37; TF 2047; AR 40-590, 40-1025; (Gray's Anatomy; Principles and Practice of Nursing, Barmer & Henderson, 4th Ed., Surgical Nursing, Ellason, Ferguson, & Ferrand, 6th Ed.)	I, C, D, AE	58						13	21	24			
13. Hospitals in the field	To familiarize student with organization and operation of field wards and operating rooms and the equipment available.	TM 8-10, 8-40; TM 8-220, 8-260; T/O and T/E 8-510, 8-550, 8-560, 8-570, 8-580, Equipment lists.	C, D, AE	12								12			
14. Time Reserved for the Commandant				16	2	2	2	2	2	2	2	2			
TOTAL HOURS				304	38	38	38	38	38	38	38	38			

TRAINING PROGRAM FORM SG 426, AUG 10 1943



Program for Medical and Surgical Technicians

Detailed Program PAR. 106

Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<u>TECHNICAL</u> 4. Anatomy and Physiology				35																
Introduction	General introduction to anatomy and physiology; the cell; anatomical terms; planes; postures; quadrants of the body.	TM 8-220, par. 16 (Physiology and Anatomy, Greishelmer, Ch. 1)	L, D	(2)	2															
b. Skeleton	Parts of the skeleton; function; structure and position of the bones.	TM 8-220, Ch. 2, Sec. I; (Physiology and Anatomy, Greishelmer, Ch. 3)	L, D	(3)	3															
c. Joints	Classification, structure and function of joints.	TM 8-220, Ch. 2, Sec. I; (Physiology and Anatomy, Greishelmer, Ch. 3)	L, D	(2)	2															

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Medical and Surgical Technicians

Technical

Detailed Program (Cont'd) *Sec. II p. 106*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
d. Muscles, skin and connective tissue.	Function and structures of muscles, skin, and connective tissue.	TM 8-220, Ch. 2, Sec. I; (Physiology and Anatomy, Greishelmer, Ch. 4)	L, D	(2)	2															
e. Circulatory system	The circulatory system; the heart and blood vessels; the lymphatics; composition of blood; detailed consideration of the heart; arteries, capillaries, veins, and lymphatics; circulation of blood through systemic, pulmonary and portal circuits.	TM 8-220, Ch. 2, Sec. I; (Physiology and Anatomy, Greishelmer, Ch. 11) TF 8-1388	L, D	(4)	4															
f. Respiratory system	The respiratory system; anatomy; mechanics and physiology of respiration.	TM 8-220, Ch. 2, Sec. I; (Physiology & Anatomy, Greishelmer, Chs. 15 and 16.) TF 8-1389	L, D	(4)	4															
g. Digestive system	Anatomy of the digestive system; foods; the physiology of digestion.	TM 8-220, Ch. 2, Sec. I; (Physiology & Anatomy, Greishelmer, Chs. 15 and 16.) TF 8-1390	L, D	(4)	4															
h. G-U system	Anatomy and physiology of the genito-urinary system and other organs of excretion of wastes.	TM 8-220, Ch. 2, Sec. I; (Physiology & Anatomy, Greishelmer, Chs. 17 and 18.) TF 8-1392	L, D	(2)	2															

TRAINING PROGRAM FORM SG 426, AUG 10 1943

## Program for Medical and Surgical Technicians

## Technical

Detailed Program (Cont'd) *Xc-III part 1c b*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Nervous system	Anatomy and physiology of the nervous system; to include brain, spinal cord, and peripheral nerves.	TM 8-220, Ch. 2, Sec. I; (Physiology & Anatomy, Greishelmer, Ch. 6 and 7.) TF 8-1393	L, D.	(4)				4												
Special Senses	Anatomy and physiology of the organs of smell, taste, sight, and hearing.	TM 8-220, Ch. 2, Sec. I; (Physiology and Anatomy, Greishelmer, Chs. 8 and 9.) TF 8-1394	L, D	(2)				2												
k. Endocrine Glands	The thyroid, parathyroid, adrenal, pituitary, sex glands, pancreas, pineal, and thymus.	(Physiology and Anatomy, Greishelmer, Ch. 21.) TF 8-1395	L, D	(2)				2												
l. Surface Anatomy	Surface anatomy and its importance.	All previous references.	D, C, AB	(4)				4												
5. Emergency Medical Treatment				45																
a. Introduction	Introductory remarks, including definitions and steps in making a diagnosis.	FM 21-11, par. 2, 5, 7; TM 8-220, par. 139.-	L, D	(1)	1															
b. Classification of Wounds.	The classification of wounds (closed and open); their dangers; and the emergency treatment of the various types.	FM 21-10, Ch. 10, Sec. II; TM 8-220, pars. 140-141.	C, D	(2)	2															
c. Care of Wounds	General rules for the care of wounds and review of dressings and bandages.	FM 21-10, par. 114-115; FM 21-11; par. 6-9; FM 8-50, pp. 1-40, 42-43; TM 8-220, par. 140-141, Sec. II.	C, D	(2)	2															
TRAINING PROGRAM FORM SG 428. AUG 10 1943																				



Technical

Detailed Program (Cont'd) *Sec. III - Par. 10b.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5. (Cont'd)																				
d. First aid packets.	The standard Medical Department first aid packets; contents and use.	FM 21-11, Sec. II	L,D,AE	(1)	1															
e. Hemorrhage	Definition, types and control of hemorrhage. Include manual pressure control and control with the tourniquet. Stress direct pressure method of control and caution in use of the tourniquet.	FM 21-10, par. 116; FM 21-11, Sec. II; TM 8-220, par. 143	C,D	(2)	2															
f. Shock	Shock, definitions, types, theories, as to cause; signs and symptoms; treatment; demonstrations of shock beds and litters.	FM 21-10, par. 117; FM 21-11, Sec. II; TM 8-220, par. 144	C,D	(2)	2															
g. Acute Inflammation	Acute inflammation; signs; steps in development; localization versus spreading infection; specific type; treatment.	(Physiology and Anatomy, Grellshelmer, Ch. 10.)	L	(2)	2															
h. Fractures	Types; classification, cause and diagnosis. Principles of bone repair; x-rays of typical fractures; treatment and splinting.	FM 21-10, pars. 118-120; FM 21-11, Sec. III; TM 8-220, par. 149-150; TM 8-50, pp. 40, 44, 65.	L,D	(4)	4															
i. Strains, sprains and dislocation	Cause, signs and symptoms, common sites, and treatment of strains, sprains and dislocations.	FM 21-10, par. 119; FM 21-11, par. 28; TM 8-220, par. 150.	L,D	(2)	2															
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

## Program for Medical and Surgical Technicians

## Technical

## Detailed Program (Cont'd) Sec. III Par. 10b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	101. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5. (cont'd)																				
j. Other kinds of injuries	Poisonous bites; snake, insect, and animal. Foreign bodies; common internal poisons and external irritants.	FM 21-10, par. 128-132; FM 21-11, Sec. IV; TM 8-220, par. 142	L,D	(2)		2														
k. Burns	Causes, degrees, effects and treatment of burns.	FM 21-10, par. 125; FM 21-11, par. 50, 69, 91 pp. 143-145	L,D	(2)		2														
l. Injuries due to heat and cold	Causes, signs and symptoms, preventive measures and treatment of heat stroke, heat exhaustion, heat cramps, frost bite, freezing and trench foot.	FM 21-10, par. 126-127; FM 21-11, par. 51-52, 54-59; TM 8-220, par. 147-148	C	(1)		1														
m. Asphyxia	Causes, diagnosis and emergency treatment of asphyxia.	FM 21-11, Sec. IV; TM 8-220, par. 145	L,D	(2)				2												
n. Artificial Respiration	Purpose, conditions requiring, and method of administering artificial respiration.	FM 21-11, par. 37-39. (Anatomy and Physiology, Griesheimer, 3d. Ed., pp. 476, 477)	C,D, AE	(2)				2												
o. Acute Respiratory Diseases	Responsibilities and duties of the technicians in connection with cases of acute respiratory diseases.	TM 8-220, Ch. 5, Sec. III, Ch. 4, Sec. IV.	L,D	(2)				2												
TRAINING PROGRAM FORM 30 428, AUG 10 1943																				

Program for Medical and Surgical Technicians

Technical

Detailed Program (Cont'd) See III Part 10b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5. (cont'd)																				
v. Chest Wounds	Types; special consideration in emergency treatment of chest wounds.	FM 21-11, par. 13	L, D	(1)					1											
g. Abdominal Wounds	Types; special consideration in emergency treatment of abdominal wounds.	FM 21-11, par. 13	C, D	(1)					1											
r. Face & Jaw Wounds; Head Injuries	Special consideration in emergency treatment of face and jaw wounds. Include in this period a discussion of head injuries and unconsciousness.	FM 21-11, par. 13, 41, 43. FS 8-35, 8-36	C	(1)					1											
s. Blood Groups and Plasma	Discuss blood groups, blood typing and the use of plasma and blood substitutes.	AR 40-1715; TM 8-210, pp. 57; TM 8-611, Sec. IV, (Physiology and Anatomy, Greishelmer, Ch. 10) FS 8-51	L, D	(2)						2										
Transfusion and Intravenous Therapy	Discuss and demonstrate blood transfusion and intravenous therapy.	AR 40-1715; TM 8-210, pp. 57; TM 8-61, Sec. IV; (Physiology and Anatomy, Greishelmer, Ch. 10)	L, D	(1)						1										
u. Chemical Warfare Agents																				
(1) Introduction, sterilization, agents; classification; materials; TRAINING PROGRAM FORM SG 428, AUG 10 1943	Definition of chemical warfare	FM 21-11, Sec. X; TM 8-285, Sec. I, II, IV, V; FS 8-65	C	(1)						1										

24-44555 34





Program for Medical and Surgical Technicians

Technical

Detailed Program (Cont'd) See III Prev. 10b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
6. (Cont'd)															
a. Introduction	Introduction; classification of diseases; classification of disease producing germs.	TM 8-227, Ch. 9, Sec. I	L	(1)	1										
b. Personal Hygiene	Importance of personal hygiene and results of neglect. Food, water, vitamins, minerals, requirements in health and disease.	TM 8-220, par. 246; Sec. I.	L, D	(2)	2										
c. Bacteria	Structure of bacteria; motility; factors influencing growth and reproduction of bacteria; production of toxins.	TM 8-227, Ch. 9, Sec. I	L, D	(1)	1										
d. Disease Producing Germs	Factors responsible for the development of diseases; disease producing germs; member and virulence; immunity, natural and acquired.	TM 8-227, Ch. 8, Sec. I	L	(1)	1										
e. Communicable Diseases	The communicable diseases, general groups, factors responsible for spread of communicable diseases; general means of control; definitions.	TM 8-220, par. 228-230	L, D	(2)	2										
f. Respiratory Diseases	Discusses respiratory diseases; method of spread; stress control measures.	TM 8-220, pars. 232-233	L, D	(2)	1	1									
g. Intestinal Diseases	Discusses the intestinal diseases; method of transmission, stress control measures.	TM 8-220, pars. 233-250	L, D	(2)	2										





Program for Medical and Surgical Technicians

Technical

Detailed Program (Cont'd) *also see Per. job*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7. Public Property	a. Introduction	Introduction to medical property and supplies; accountability and responsibility; expendable and non-expendable items; standard and non-standard items.	TM 8-220, par. 308-309  L,D	6 (1)	1															
	b. Expendable and non-expendable items	The Medical Department supply catalogue; issue of expendable and non-expendable supplies to wards and other hospital departments; the use of MD and AGO forms.	TM 8-220, par. 11, 309, 311; Medical Supply Catalogue  L,D	(2)	2															
	c. Property accountability and responsibility	Transfer of property accountability and responsibility; disposition of lost, destroyed or damaged property.	TM 8-220, par. 319, 322, 323  L,D	(1)	1															
	d. Ward supplies	Ward property accountability and responsibility; expendable and non-expendable items; the issue and transfer of property on the wards.	TM 8-220, par. 308-324  L,D	(2)	2															
	8. Ward Procedures				69															
a. Introduction	Introduction to ward procedures.		None	L	(1)	1														
b. Ward Sanitation																				
TRAINING PROGRAM FORM SS 428, AUG 18 1943																				

7

Program for Medical and Surgical Technicians

Technical

Detailed Program (Cont'd) *Sec. II Par. 10 b*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8. (Cont'd)																				
(1) Care of Ward	Importance of cleanliness and order on the ward; cleaning methods and work organization; heating and ventilation; natural and artificial lighting; control of noise and odors; arrangement and care of patients flowers.	TM 8-220, par. 186-193; (Harmer & Henderson, Principles and Practice of Nursing, 4th Ed. Ch. 5.)	C,D,AE	(2)	2															
(2) Care of linens and supplies	Care of clean linen and the linen room; care of soiled linen; care and cleaning of equipment; care and arrangement of supplies; preparation of laundry lists.	(Harmer & Henderson, Principles and Practice of Nursing, 4th Ed. pp. 132,169)	C,D,AE	(2)	2															
c. Beds and Bed Making																				
(1) The Un-occupied bed	The kinds of hospital beds; aims and procedures of bedmaking; making the unoccupied bed.	TM 8-220, par. 202, 203. (Harmer & Henderson, Principles and Practice of Nursing, 4th Ed. pp. 125-132)	C,D,AE	(2)	2															
(2) The Occupied bed	Making the occupied bed; points to be considered for the comfort and privacy of the patient.	TM 8-220, par. 202-203. (Harmer & Henderson, Principles and Practice of Nursing, 4th Ed. pp. 392.	C,D,AE	(2)	2															

TRAINING PROGRAM FORM 56 428, AUG 10 1943

Program for Medical and Surgical Technicians

Technical

Detailed Program (Cont'd) Sec. III Part 10b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8c. (Cont'd)																				
(3) The Post-Operative bed	Principles, aims and procedure in making the recovery bed for the post-operative patient.	(Harmer and Henderson, Principles & Practice of Nursing, 4th Ed. pp. 822-825)	C,D,AE	(2)		2														
(4) Fracture bed	Principles, aims and procedure in making the fracture bed; the Bradford frame; the Balkan frame; tractions.	(Harmer & Henderson, Principles & Practice of Nursing, 4th Ed. pp. 961-971)	C,D,AE	(2)		2														
d. Admission of patients	The process of admission of patients to the hospital and the wards; the disposition of patients personal effects; the process of discharging the patient from the hospital.	TM 8-220, par. 194	I,AE	(2)		2														
e. Temperature, pulse and respiration	How to take temperature, pulse and respiration and how to report them. The variations of temperature, pulse and respiration in health and disease.	TM 8-220, pars. 197-200. (Physiology and Anatomy, Greish-simer Ch. 12.) pp. 8-61; TP 8-1346	C,AE	(4)		4														
f. Baths and bathing	The various types of baths; their purposes; procedure in giving them.	TM 8-220, par. 204	C,D	(2)			2													
g. Care and comfort of the patient	Mental attitude of the patient; physical causes of discomfort; care of mouth and teeth; care of dentures; care of nose, hair, nails; care of skin and back; morning and evening toilet; prevention and treatment of bed sores; changing	TM 8-220, par. 196, 271, 204-206, 211; (Harmer & Henderson, Principles and Practice of Nursing, 4th Ed. pp. 281-302, Ch. 15)	C,D,AE	(4)		4														
TRAINING PROGRAM FORM 56 426, AUG 10 1943																				



## Program for Medical and Surgical Technicians

## Technical

## Detailed Program (Cont'd) Sec. III, Par 106

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8g. (Cont'd)	position of the patient; use of pillows; transfer of patient from litter to bed and vice versa; elevation of head in dyspnea; sitting up in bed, wheel chair.																			
Care of ambulatory patients	Reason for higher proportion of ambulatory patients in army hospitals than in civilian hospitals; assisting the patient in the return to normal life; sitting up in a chair; assisting patient to the wheel chair; assisting patient to dress and undress.	(Harmer & Henderson, Principles and Practice of Nursing, 4th Ed. Ch. 15)	C,D,AE	(2)			2													
1. Diets and trays	Food carts; care of dishes and equipment; care of ward diet kitchens; serving hot and cold food; set-up of trays; size of servings; feeding the patient; use of feeding tube; principle constituents of food; types of diets; routine and special diets for specific diseases; liquid nourishment; ice and tap water.	TM 8-220, para. 195, 209, 330, 332, 336; (Harmer & Henderson, Principles and Practice of Nursing, 4th Ed. Ch. 13)	C,D,AE	(4)			4													
J. Elimination of body wastes	Collection and labeling of stool and urine specimens; fluid intake and output; cleansing and sterilization of urinals and bedpans; cleansing of hands. Notebook records kept by ward personnel for transfer by nurse to patients record.	TM 8-220, par. 210, a,b,c; 212, 1, 222-223; (Harmer & Henderson, Principles and Practice of Nursing, 4th Ed. 336-351; 653-657)	C,D,AE	(2)				2												

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Medical and Surgical Technicians

Technical

Detailed Program (Cont'd) Sec. III Part 106

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8. (Cont'd)																				
k. Enemata	The purpose and various kinds of enemata; equipment and its care; procedure of giving enemata.	TM 8-220, par. 212; TF 8-1383	L, D	(2)					2											
Catheterization	The purpose and procedure of catheterization.	TM 8-220, par. 222-223	L, D, AE	(2)					2											
m. Medications	General rules in giving medicines; methods of administrations. Technique of administering hypodermic medication.	TM 8-220, par. 212; TF 8-1366	L, D	(2)					2											
n. Control of communicable diseases in hospital																				
(1) Prevention of transmission of transmissible disease.	Methods of prevention of transmission of communicable disease within the hospital--the average isolation ward; its equipment; peculiarities of operation of isolation ward.	TM 8-220, par. 226-233	C, D	(2)					2											
(2) Nursing care of communicable diseases	The importance of a high standard of nursing care in communicable diseases; special procedures and precautions in care of cases of communicable diseases.	TM 8-220, par. 231-233	C, D	(2)					2											
(3) Isolation Technique	Definition, rules, and method of carrying out isolation technique.	TM 8-220, par. 232	C, D, AE	(4)					4											
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

## Program for Medical and Surgical Technicians

Detailed Program (Cont'd) Sec. III, Part 106

## Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
o. External Applications	The various external applications; indications for use; procedure for administration; cautions to be observed.	TM 8-220, par. 213	C,D	(1)							1									
Nursing Care of burns	Consideration necessary and the procedures followed in the nursing care of burns.	TM 8-220, par. 147	C,D	(2)							2									
q. Pre-operative and post-operative care	Considerations, both physical and mental in the pre-operative preparation of the patient; post-operative care while under anesthetic, while regaining consciousness, during convalescence; post-operative complications.	TM 8-220, par. 214-219; TM 8-260, par. 233-243. (Harmer & Henderson, Principles and Practice of Nursing, 4th Ed. Ch. 40, 41)	C,D,AE	(2)							2									
r. Use and care of rubber goods	Filling and care of hot water bottles and ice caps; care of rubber gloves (including repair); rubber sheets and rubber tubing.	TM 8-220, par. 213a(1), 213 d (1) (a); (Harmer & Henderson, Principles and Practice of Nursing, 4th Ed. pp. 127, 205-207, 505, 510, 982, 983.	C,D,AE	(2)							2									
s. Gastric lavage and gavage	The purpose of, and procedures followed in gastric lavage and gavage.	TM 8-220, par. 220.	C,D	(1)							1									
t. Infusions & hypodermoclysis and hydropodermoclysis	The purpose of, and procedure followed in administering infusions and hydropodermoclysis.	TM 8-220, par. 212	C,D	(2)							2									

TRAINING PROGRAM FORM SG 428, AUG 10 1943

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Detailed Program (Cont'd) Sec. 4, PAR. 10b

Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8. (Cont'd)																				
U. Aspiration of body cavities	Necessity for aspirating the chest and abdominal cavities; the diseases producing effects requiring paracentesis; procedure followed in aspiration of body cavities.	TM 8-220, par. 224. (Christopher, Textbook of Surgery, 2nd Ed. pp. 1594-1595)	C, D	(1)						1										
V. Nursing care of pneumonia	The peculiarities in the nursing care of pneumonia.	TM 8-220, par. 233	C	(2)							2									
W. Oxygen therapy	The various conditions which may require oxygen therapy; purpose; methods of carrying out oxygen therapy.	TM 8-260, par. 231	C, D	(2)							2									
X. Medical Technicians and the nervous patient	The peculiarities in handling psychoneurotic and neuropsychiatric patients. The importance of understanding that these patients are mentally ill and treating them as a sick person.	TM 8-260, par. 167 (Harmer and Henderson, Principles and Practice of Nursing, 4th Ed. pp. 13-14)	C	(1)							1									
Nursing care of mental patients	Special consideration in handling and nursing care of mentally ill patients. Mental wards; their construction plan and equipment.	TM 8-260, par. 167 (Harmer and Henderson, Principles and Practice of Nursing, 4th Ed. pp. 222, 367.)	C, D	(2)							2									
Z. Nursing care of tropical fevers	Special considerations in the handling and nursing care of tropical fevers.	TM 8-220, par. 233	C, D	(2)							2									

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Medical and Surgical Technicians

Technical

Detailed Program (Cont'd) Sec. III, Part 1a

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8. (Cont'd)																				
aa. Blood Pressure	Discuss blood pressure; normal levels; variations from the normal and possible causes; the correct procedure in taking blood pressure.	TM 8-220, par. 198	C,D,AE	(2)							2									
9. mathematics				11																
a. Review of Simple Mathematics	Review of simple arithmetic; reading and writing of Arabic and Roman numerals; addition, subtraction, multiplication, and division of fractions; decimals.	TM 1-900, (Any standard textbook of mathematics)	C,D	(4)	4															
b. Metric System	Metric system; apothecaries system; conversion of metric to apothecaries system; conversion of metric and apothecaries systems to household equivalents.	TM 8-233, par. 5,6,8,9,18	C,D	(3)			3													
c. Centigrade & Fahrenheit scales	Centigrade and Fahrenheit scales. Conversion of one to the other; ratio; percentage and proportion.	TM 8-233, par. 6, 9, 18	C,D	(2)	2															
d. Percentage & ratio solutions	Preparation of percentage and ratio solutions.	TM 8-233, Sec. VI and VIII	C,D	(2)			2													
10. Materia Medica				14																
e. Drug Therapy	Introduction; classes of drugs; vehicles of administration.	TM 8-233, Ch. I	C,D	(2)				2												
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Medical and Surgical Technicians

Technical

Detailed Program (Cont'd) Sec. IV, Div. 116.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
10. (Cont'd)																				
b. Hypnotics	Definition; action; most commonly used and their dosage; precautions.	(T. Sollman, A Manual of Pharmacology, 6th Ed. pp. 774-802)	C,D	(1)				1												
Sedatives	Definition; action; most commonly used and their dosage, precautions.	(T. Sollman, A Manual of Pharmacology, 6th Ed. pp. 774-802)	C,D	(1)				1												
d. Narcotics	Definition; action; most commonly used and upper limits of safety in dosage; precautions.	(T. Sollman, A Manual of Pharmacology, 6th Ed. pp. 268-301)	C,D	(2)				2												
e. Stimulants	Definition; action; most commonly used and dosage; precautions.	(T. Sollman, A Manual of Pharmacology, 6th Ed. pp. 421-453)	C,D	(1)				1												
f. Cathartics, laxatives, purgatives & drastics.	Definition; action; most commonly used and dosage; precautions.	(T. Sollman, A Manual of Pharmacology, 6th Ed. pp. 196-210, 867-889)	C,D	(1)				1												
g. Poisons	Definitions; classification; action; antidote.	(T. Sollman, A Manual of Pharmacology, 6th Ed. pp. 226-249, 762-774)	C,D	(1)				1												

TRAINING PROGRAM FORM SG 428, AUG 10 1943



## Program for Medical and Surgical Technicians

## Technical

## Detailed Program (Cont'd) Sec. III Par. 10b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
10. (Cont'd)															
h. Anesthetics	Local, regional and general anesthetics; commonly used agents.	(T. Sollman, A Manual of Pharmacology, 6th. Ed. pp. 521-554)	C, D	(2)						2					
Sulfonamides	The most commonly used; actions side effects; precaution.	(T. Sollman, A Manual of Pharmacology, 6th. Ed. pp. 638-648)	C	(2)						2					
j. Penicillin	Description; procedure in preparation of the drug; uses.	(Any late edition Pharmacology text-book) TB Med 112. 1944	C	(1)						1					
11. Ward Management				9											
a. Military Hospitals	Organization and administration of military hospitals.	TM 8-220, Ch. 3; AR 40-590	L	(1)						1					
Ward personnel and duties	Duties of ward orderlies, ward technicians, ward masters, nurses, ward officers, nurses aides, (civilian), civilian employees; relation to each other.	TM 8-220, par. 189	C	(1)						1					
c. Visitors	Visitors and visiting hours; disposal of patients property and valuables.	TM 8-220, Ch. 4; AR 40-590	C	(1)						1					
d. Procedure following death	Procedure following death of patient; forms to be filled out; disposition of personal effects.	TM 8-220, para. 191, 305	C, D	(2)						2					
TRAINING PROGRAM FORM SG 428, AUG 10 1943															

Program for Medical and Surgical Technicians

Technical

Detailed Program (Cont'd) Sec. III, Par. 10 b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
11. (Cont'd)															
e. Ward Records	Principles, purpose and importance of medical records; the M.D. 55 series; explanation with hypothetical cases and sample forms; other forms relating to the patient; ward morning report; reports of seriously and critically ill; duty rosters; ward census; transfer sheet; other lists—exhibit sample forms.	TM 8-220, par. 290	C,D,AE	(2)						2					
f. Care of instruments	Responsibilities of ward attendants in connection with care and sterilization of instruments.	TM 8-220, par. 115-119	C,D,AE	(2)						2					
12. General Training in hospital procedures				58											
a. Gown & glove technique															
1) Scrubbing technique	Clothing which should be worn just prior to scrubbing including cap and mask; adjustment and proper wearing of the cap and mask; the accepted technique of "scrubbing up"; precautions necessary to prevent contamination following scrubbing; sterile towel package and drying the hands; powdering the hands.	(Surgical Nursing, Eliaeson, Ferguson, and Farrand, 6th. Ed. pp. 610-614)	C,D,AE	(2)						2					
(2) Gown technique	The package of sterile gowns; method of holding sterile gowns for wearing; how to get into gown; fastening; the gown; precautions to prevent contamination.	(Surgical Nursing, Eliaeson, Ferguson, Farrand, 6th. Ed. pp. 610-614)	C,D,AE	(1)						1					
TRAINING PROGRAM															

Program for Medical and Surgical Technicians

Technical

Detailed Program (Cont'd) Sec. III. Part 10b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
12a. (Cont'd)															
(3) Glove technique	Sterile glove package; putting on the gloves; precautions to prevent contamination.	(Surgical Nursing, Ellason, Ferguson and Farrand, 6th Ed. pp. 610-614)	C,D,AE	(2)					2						
D. Preparation and sterilization of ward and operating room supplies															
(1) Dressings, sponges and linen supplies	Wet-dry, packaging and sterilization of dressings, sponges and linen supplies.	(Surgical Nursing, Ellason, Ferguson, and Farrand, 6th Ed. pp. 582-586)	C,D,AE	(3)					3						
(2) Instruments & Utensils	The sterilization and care of instruments and utensils.	(Surgical Nursing, Ellason, Ferguson, and Farrand, 6th Ed. pp. 586-591)	C,D,AE	(3)					3						
(3) Rubber goods	The sterilization and care of rubber goods.	(Surgical Nursing, Ellason, Ferguson and Farrand, 6th Ed. pp. 591-595)	C,D,AE	(2)					2						
(4) Ligatures, sutures and needles.	The types, uses, and sterilization of ligatures, sutures and needles.	(Surgical Nursing, Ellason, Ferguson and Farrand, 6th Ed. pp. 595-600)	C,D,AE	(1)						1					



Technical

Detailed Program (Cont'd) *Sec. III, Part Cb*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
12b. (Cont'd)																				
(5) Miscellaneous supplies	Preparation and sterilization of drainage materials; petroleum jelly, gauze; paraffin gauze; iodoform gauze.	(Surgical Nursing, Eliason, Ferguson, and Farrand, 6th Ed. pp. 600-606)	C,D,AE	(2)							2									
c. Dressing carriage and sterile tray	The preparation and set-up of dressing carriages and sterile trays.	(Surgical Nursing, Eliason, Ferguson and Farrand, 6th Ed. pp. 644-651)	C,D,AE	(2)							2									
d. Sterilizers and surgical instruments																				
(1) Sterilizers	The types, purpose, use and operation of sterilizers.	(Surgical Nursing, Eliason, Ferguson, and Farrand, 6th Ed. pp. 577-582)	C,D,AE	(4)							4									
(2) Surgical Instruments	The types, use, and care of surgical instruments.	(Surgical Nursing, Eliason, Ferguson and Farrand, 6th Ed. pp. 586-590, 594-595)	C,D,AE	(4)							4									
e. Intravenous techniques	The correct procedure for administering intravenous fluids, medications; blood transfusions; Plasma transfusions.	(Principles and Practice of Nursing, Hammer & Henderson, 4th Ed. p. 580)	C,D	(2)							2									
TRAINING PROGRAM FORM SS 426, AUG 10 1943																				

## Program for Medical and Surgical Technicians

## Detailed Program (Cont'd) Sec. III, Part 12b

## Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
12. (Cont'd)																				
f. Blood pressure, temperature, pulse, and respiration	Review of blood pressure, pulse, temperature and respiration; methods of taking and recording; normal and variations from the normal.	(Principles and Practice of Nursing, Harner & Henderson, 4th. Ed., Ch. 10)	C, AE	(2)									2							
g. Fractures, dislocations & sprains																				
(1) Emergency measures	Review of fracture, dislocations and sprains and emergency medical treatment of them.	FM 21-11, Sec. III; C, D, AE TM 8-220, par. 14g		(2)									2							
(2) Nursing care	The nursing care of fracture patients; special equipment for handling; special consideration.	(Surgical Nursing, Elison, Ferguson and Ferrand, 6th. Ed. pp. 446-477)	C, D	(3)									3							
b. Easter Casts	Definition; making of plaster bandages; indications for use; application and removal of casts; precautions.	FM 8-50, pp. 40-41	C, D, AE	(2)									2							
1. Topographical Anatomy and local pre-operative preparation	Review of topographical anatomy; the local pre-operative preparation of the field; positions of the patient for surgery.	(Gray's Anatomy, pp. 1271-1332; Surgical Nursing Elison, Ferguson and Ferrand, 6th. Ed., pp. 68-86.)	C, D	(2)									2							
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Medical & Surgical Technicians

Technical

Detailed Program (Cont'd) See Att. Prv. 106

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
12. (Cont'd)																				
J. Wangensteen apparatus; gastric and colonic tubes	The purpose and use of Wangensteen suction, gastric and colonic tubes.	(Principles and Practice of Nursing, Harmer & Henderson, pp. 640)	C, D	(2)																
K. Spinal puncture	The purpose and set-up required; position of the patient; preparation of the field; and correct procedure for doing spinal puncture.	(Principles & Practice of Nursing, Harmer & Henderson, pp. 454, 456)	C, D	(2)																
1. Operating room set-up; personnel & other duties																				
(1) Operating Suite	The construction, plan, and equipment of the operating suite; house-keeping of the operating suite.	TM 8-220, par. 112-118 (Surgical Nursing, Ellason, Ferguson, and Farrand, 6th. Ed. pp. 562-576)	C, D, AE	(3)																
(2) Operating room proper	The operating room; its equipment and housekeeping; rules to be observed in the operating room.	(Surgical Nursing, Ellason, Ferguson, and Farrand, 6th. Ed. pp. 563, 566, 576.)	C, D, AE	(2)																
(3) Operating room personnel	The personnel of the operating room and their various duties.	TM 8-220, par. 122.	C, D, AE	(4)																
TRAINING PROGRAM	FORM SG 428, AUG 10 1943																			



Program for Medical and Surgical Technicians

Technical

Detailed Program (Cont'd) See III, Para. 16b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
12. (Cont'd)																				
W. Review of emergency medical treatment																				
(1) Bandaging	Review of bandaging.	FM 21-11, par. 6-12; FM 8-50, pp. 2-40; 42-44	C, AE	(2)								1	1							
(2) Splinting	Review of splinting.	FM 21-10, par. 118; FM 21-11, par. 16-28; FM 8-50, pp. 44-66	C, AE	(2)									2							
(3) Emergency treatment	Review of wounds and their care; hemorrhage and its control; shock and its treatment.	FM 21-10, par. 114-118; FM 21-11, par. 6-10; FM 8-220, par. 140-145.	C, AE	(2)									2							
13. Hospitals in the field.					12															
a. Introduction	Introduction of the trainee to his mission as it will be carried out in CZ installations; review of organization of CZ medical units and the chain of evacuation; differences to be encountered in CZ and ZI hospital organization and equipment; air-raid precaution.	FM 8-10, Ch. 1, II; FM 8-260; T/O & T/E 8-510, 8-550, 8-560, 8-570, 8-580, Equipment Lists.	C	(1)									1							
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Detailed Program (Cont'd) Sec. III, Para. 10b

Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
13. (Cont'd)																				
b. Ward set-up; equipment, & procedures	Types of beds which will be available in GZ installations; capability of ward tent; equipment available on the ward; baths and bathing in field installations; source of hot water; source of drinking water; preparation of diets and trays in the field; waste disposal in cases of communicable diseases and others in the field; care of bed pans and urinals in field installations; procedure following death of patient; disposition of patients from field installations.	TM 8-10, par. 17; 37-53; 55-70; TM 8-220, par. 202; TM 8-260, par. 101-107; 183; 69-76	C, D	(2)									2							
c. Admission, care and disposition of patients	Applicatory exercise on admission, care and disposition of patients in mock field set-up to include as much of 11b as practicable.	All previous references.	AE	(4)									4							
Operating room in the field	Set-up of operating room and central surgical supply in the field; differences in GZ and ZI equipment; portable operating tables and fracture tables; source of power and type of artificial illumination available; instruments available; Med. chests 1 & 2; "scrubbing-up" in the field; field sterilizers and their operation; preparation and sterilization of ward and operating room supplies in the field.	TM 8-10, pp. 252-255; T/O & T/E 8-560; Equipment Lists (Surgical Nursing, Watson, Ferguson, and Farrand, 6th Ed. pp. 582-606)	C, D	(2)									2							
TRAINING PROGRAM FORM 36 428, AUG 10 1943																				

## Program for Medical and Surgical Technicians

## Technical

## Detailed Program (Cont'd) Sec. III. Par. 10b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
13. (Cont'd)																				
e. The operating room & preparation and sterilization of supplies	Applicatory exercise on the use of the field operating room; end preparation and sterilization of supplies.	All previous references	AE	(3)									3							
14. Time Reserved for the Commandant				16	2	2	2	2	2	2	2	2	2							
TOTAL HOURS				304	38	38	38	38	38	38	38	38	38							

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Program for Medical Technicians

Phase II Technical

Summary Program, Par. 10a(1)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
					12	13	14	15	16						
4. Ward Duty (On-the-job training)	NOTE: - This phase of training will be applicatory "on-the-job" in character and supplements the 8 weeks didactic program for Medical and Surgical Technicians. Upon completion of the 8 weeks' didactic phase and this applicatory phase, enlisted personnel will be qualified as Medical Technicians (SSN 409).	All previous references for Medical and Surgical Technicians.	AE	144											
5. Time Reserved for the Commandant				8									2	2	2
TOTAL HOURS				152									38	38	38

Program for Medical Technicians  
Phase II Technical

Detailed Program, Par. 10b(1)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
					15	16												
	<p>NOTE:— This phase of training supplements the 8 weeks didactic phase for Medical and Surgical Technicians and upon completion of both phases, enlisted personnel will be qualified as Medical Technicians (SSN 409).</p> <p>Class will be divided into small groups and rotated through the various medical, neuropsychiatric, contagious and venereal disease wards; out-patient clinic, dispensary and operating rooms of the hospital. Trainees will be given actual duty assignments and training will be "on-the-job" type. The students will be working under detailed supervision of Medical Corps officers, charge nurses, and wardmasters. 36 hours of this practical training will be devoted to night duty on active wards—but not more than 12 hours per week will be devoted to night duty.</p>																	

Program for Medical Technicians

Phase II Technical

Detailed Program (Cont') Par. 10b(1)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
4. Ward Duty (on-the-job training)	The following material will be covered: Set-up and operation of medical ward; admission and discharge of patients; baths and bed making; enemas; patient's propriety; charting notes, care of dead; a standard army procedure for care of burns; medication; standard ward order sheet for various types of medication orders; preparation of hypodermics; average dosage and calculation of dosage for the more commonly used narcotic drugs; charting medication and nursing notes; aseptic technique for venipuncture; venoclysis; procedure for administration of intravenous fluids; special precautions involved; sterile technique, set-up tray, care of equipment; set-up and use of standard hospital dressing cartage, dressing tray; techniques for dressing clean and septic wounds; repeated practice in taking and recording blood pressure, pulse, temperature and respiration; preparation of standard dressings; medical packs, syringes, needles, surgical gloves, towels and gauze; standard hospital technique for sterilization; operation and care of autoclave; electric and steam boilers; chemical sterilization; routine ward			144										36	36	36	36																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							



Program for Medical Technicians

Phase II Technical

Detailed Program (Cont'd) Par.10b(1)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
4. Ward Duty (Cont'd)		Records; specialized care of such cases as pneumonia, cardiacs and seriously ill patients; recognition and care of neuropsychiatric patients; neuropsychiatric ward and its peculiarities; set-up for isolated patients; disposal of contagious diseases excreta and waste; decontamination of contagious ward and subicle; types of isolation technique for insect-borne disease, intestinal disease and respiratory diseases, administration of out-patient clinic and dispensary; management of emergencies; clinic and dispensary records; assisting Medical officers in examination and therapy.		8											
5. Time Reserved for the Commandant				8											
TOTAL HOURS				152									38	38	38

Program for Surgical Technicians

Phase II Technical

Summary Program, Par. 10a(2)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK											
					1	2	3	4	5	6	7	8	9	10	11	12
					13	14	15	16								
4. Ward Duty (on-the-job training)	NOTE:- This phase of training will be applicatory "on-the-job" in character and supplements the 8 weeks didactic program for Medical and Surgical Technicians. Upon completion of the 8 weeks didactic phase and this applicatory phase, enlisted personnel will be qualified as Surgical Technicians (SSN 861).	All previous references for Medical and Surgical Technicians	AE	144								36	36	36	36	
5. Time Reserved for the Commandant				8								2	2	2	2	
TOTAL HOURS				152								38	38	38	38	





Program for Surgical Technicians

Phase II Technical

Detailed Program, Par. 10b(2) (Cont'd)

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4. Ward Duty (Cont'd)	gency and field bandaging; standard form of bandaging and hitches, using triangular and roller bandages; emergency splinting; specialized care of spinal injuries; plaster bandages and their application; precautions and dangers in use of casts; removal of casts; use of fracture table; set-up of Bradford and Belker frames; types of traction appliances; skeletal and skin traction; special nursing of amputations; technique of applying hot, wet dressings; peculiarities of I&M and G-U nursing; technique of donning surgical gown and gloves; technique of surgical scrub; sterilization, folding and packing gown and glove sets; repair of gloves; standard hospital techniques for sterilization; set-up of operating room; techniques of scrub nurse, circulating nurse, and operating room technicians; cleaning and care of operating room, its fixtures and equipment.																			
5. Time Reserved for the Commandant				8													2	2	2	2
TOTAL HOURS				152													38	38	38	38
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Medical Technicians

(Advanced)

Summary Program

Part II.

SUBJECT	SABER		TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK														
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<u>TECHNICAL</u>																				
4. Internal Medicine	Note: The three months of this course will be devoted to actual work, "on-the-job" training. Understudy and parallel training in the general medical wards of hospital, out-patient clinic, and dispensary.	TM 8-220, Obs. 4, 6; TM 8-400	AE	108	36	36	36													
5. Gastro-Intestinal	Understudy and parallel training in the Gastro-Intestinal wards of the hospital.	TM 8-220, Obs. 4, 6	AE	72				36	36											
6. Cardio-Vascular	Understudy and parallel training in the cardio-vascular wards of the hospital.	TM 8-220, Obs. 4, 6	AE	72						36	36									
7. Neuro-psychiatric	Understudy and parallel training in the neuro-psychiatric wards of the hospital.	TM 8-220, Obs. 4, 6; TM 8-260, Obs. 3	AE	72								36	36							
8. Venereal Disease	Understudy and parallel training in the venereal disease wards of the hospital.	TM 8-220, Obs. 4, 6	AE	36											36					

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Medical Technicians

(Advanced)

Summary Program (Contd) P.C.F. 11d.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9. Communicable Diseases	Understudy and parallel training in the communicable disease wards of the hospital.	TN 8-220, Chs. 4, 6	AE	72											36	36				
10. Time Reserved for the Commandant				24	2	2	2	2	2	2	2	2	2	2	2	2				
TOTAL HOURS				456	38	38	38	38	38	38	38	38	38	38	38	38				



Program for Medical Technicians

(Advanced)

Detailed Program Part II b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<u>TECHNICAL</u>	Notes: The three months of this course will be devoted to actual work, "on-the-job" training in the wards of a general hospital during which time the students will understudy and parallel the work of nurses on duty in those wards, under the supervision of the officers of the Medical Department of the school, ward officers, charge nurses, and ward masters. Lectures will be scheduled as required to augment the applicatory training.																		

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Medical Technicians

(Advanced)

Detailed Program Sec. III per 114.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
4. Internal Medicine	Understudy and parallel training in the general medical wards of hospital, out-patient clinic, and dispensary. Will include ward management, ward records, and ward diet kitchen.	TM 8-220, Ch. 4, 6; TM 8-500	AT	108	36	36	36								
5. Gastro-intestinal	Understudy and parallel training in the gastro-intestinal wards of the hospital.	TM 8-220, Ch. 4, 6	AT	72				36	36						
6. Cardio-vascular	Understudy and parallel training in the cardio-vascular wards of the hospital.	TM 8-220, Ch. 4, 6	AT	72					36	36					
7. Neuro-psychiatric	Understudy and parallel training in the neuro-psychiatric wards of hospital. Training will include care and management of the disturbed patient and management of the closed ward.	TM 8-220, Ch. 4, 6; TM 8-260, Ch. 3	AT	72							36	36			
8. Venereal disease	Understudy and parallel training in the venereal disease wards of the hospital.	TM 8-220, Ch. 4, 6	AT	36									36		
9. Communicable disease	Understudy and parallel training in the communicable disease wards of the hospital. To include isolation technique, care of acute infection cases, pneumonia cases, and the particular techniques essential to communicable disease ward diet kitchen.	TM 8-220, Ch. 4, 6	AT	72										36	36

Program for Medical Technicians

(Advanced)

Detailed Program (Cont'd) p. 11b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
10. Time Reserved for the Commandant				24		2	2	2	2	2	2	2	2	2	2	2				
TOTAL HOURS				456	38	38	38	38	38	38	38	38	38	38	38	38				

TRAINING PROGRAM FORM SG 428, AUG 10 1948



Program for Surgical Technicians

(Advanced)

Summary Program per 12d.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
					15	16	17	18	19	20	21	22	23	24	25	26	27	28
<u>THEORETICAL</u>	Note: The three months of this course will be devoted to actual work, "on-the-job" training in the surgical wards of a general hospital.																	
General Surgery	Understudy and parallel work in the septic and aseptic surgical wards. No include as much actual operating room experience as can be arranged.	TM 8-220, Ch. 3, 4; TM 8-260, Ch. 4	AE	144	36	36	36	36										
5. Genito-urinary	Understudy and parallel work in the G-U wards.	TM 8-220, Ch. 3, 4; TM 8-260, Ch. 4.	AE	72				36	36									
6. Orthopedic	Understudy and parallel work in the orthopedic wards, clinic and plaster room.	TM 8-220, Ch. 3, 4; TM 8-260, Ch. 4	AE	144						36	36	36	36					
7. Eye, Ear, Nose and Throat	Understudy and parallel training in ENT wards and clinic.	TM 8-220, Ch. 3, 4; TM 8-220, Ch. 4	AE	72											36	36		

Program for Surgical Technicians

(Advanced)

Summary Program (Cont'd) Per. 12d.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
8. Time Reserved for the Commandant				24		2	2	2	2	2	2	2	2	2	2			
TOTAL HOURS				456	38	38	38	38	38	38	38	38	38	38	38	38		

Program for Surgical Technicians

(Advanced)

Detailed Program per 12b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK											
					1	2	3	4	5	6	7	8	9	10	11	12
TECHNICAL  General Surgery	<p>Note: The three months of this course will be devoted to actual work, "on-the-job" training in the surgical wards of a general hospital, during which time the student will understudy and parallel the work of the nurses on duty in those wards, under the supervision of the ward officers, charge nurses and ward masters. Lectures will be scheduled as required to augment the apticiency training.</p> <p>Understudy and parallel training in the septic and aseptic surgical</p>	TM 8-220, Ch. 3, 4; TM 8-260, Ch. 4	AE	144	36	36	36	36								



Program for Surgical Technicians

(Advanced)

Detailed Program (Cont'd) p.c. 12b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4. General Surgery (Cont'd)	wards. To include as much actual operating room experience as can be arranged. Will include pre- and post-operative care; diet; immediate post-operative routine; operating room procedure and technique.	TM 8-220, Ch. 3, 4; TM 8-260, Ch. 4	AE	72					36	36										
5. Genito-urinary	Understudy and parallel work in the G-U wards. Training will include pre-operative and post-operative care.	TM 8-220, Ch. 3, 4; TM 8-260, Ch. 4	AE	72																
6. Orthopedic	Understudy and parallel work in the orthopedic wards, clinic and plaster room. Training will include work in orthopedic surgery; pre- and post-operative care, plaster casts, and traction cares.	TM 8-220, Ch. 3, 4; TM 8-260, Ch. 4	AE	144							36	36	36	36						
7. Eye, Ear, Nose and Throat	Understudy and parallel training in ENT wards & clinic. To include assistance at surgical cases, pre- and post-operative care and diets.	TM 8-220, Ch. 3, 4; TM 8-260, Ch. 4	AE	72													36	36		
8. Time Reserved for the Commandant				24	2	2	2	2	2	2	2	2	2	2	2	2	2			
TOTAL HOURS				456	36	36	36	36	36	36	36	36	36	36	36	36	36			
TRAINING PROGRAM					FORM SG 426, AUG 10 1943															

Program for Pharmacy Technicians

Technical

Summary Program Page 13a.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<u>TECHNICAL</u>																				
4. Introduction	To acquaint the student with the aims of the course and the policies of the school. Nomenclature of U. S. P. and N. F.	U.S.P. XII, NF VII; Practice of Pharmacy (Remington 8th Ed., 1936)	L, C	1	1															
5. Pharmacy, General and Galenical	To instruct the student in the various techniques and operations used in pharmacy. Detailed study of U.S.P. and N.F. preparations used in military pharmacy.	Practice of Pharmacy (Remington, 8th. Ed., 1936) and TM 8-233	L, C, D, AE	32	5	6	6	6	6	3										
6. Pharmacy, Prescription Study	To instruct the student in the proper method of filling compatible and incompatible prescriptions.	TM 8-233; Practice of Pharmacy, 8th. Ed., 1936	L, C, D, E	18							3	3	3	3	3	3				
7. Pharmacy Mathematics	To instruct the student in all phases of arithmetic and metrology as applied in pharmacy.	TM 8-233, Arithmetic of Pharmacy (Stevens, 5th. Ed.)	L, C, E,	36	3	3	3	3	3	3	3	3	3	3	3					

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Pharmacy Technicians

Technical

Summary Program (Cont'd) Page 13a.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK									
					1	2	3	4	5	6	7	8	9	10
8. Chemistry	To instruct the student in the fundamental principles of inorganic and organic chemistry. Study of important chemical drugs and common chemical reactions.	TM 8-233, Principles of Pharmacy, (Army & Mitchell's) General Chemistry (Smith & Kendall).	I, O, D, P	36										
9. Materia Medica	Study of elementary anatomy and physiology. Detailed study of pharmacodynamics, therapeutics, posology, and toxicology of important official drugs.	Pharmacology, Materia Medica, & Therapeutics, (Solomon, 4th. Ed.) TM 8-233	I, O, E	21										
10. Administration and Supply	Study of administration, supply, records, and arrangement of a military pharmacy.	AR 40-590, Medical Supply Catalogue.	L, O	4										
11. Pharmacy Laboratory	Actual manufacture of U.S.P. and N.F. preparations and compounding typical compatible and incompatible prescriptions.	All previous references.	AE, E	284										
Time Reserved for the Commandant				24										
TOTAL HOURS				456										



Program for Pharmacy Technicians

Technical

Detailed Program p.c. 13b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<u>TECHNICAL</u>																				
4. Introduction	Familiarization of student with course, its aims, and the importance of accuracy and cleanliness in practice of pharmacy; to acquaint the student with the U.S.P. and N.F. and its nomenclature.	TM 8-233, par. 1-2. Practice of Pharmacy (Remington, 8th. Ed., 1936) pp. 14-25 USP XII NF VII	L.C	1	1															
5. Pharmacy, General and Galenical				32																
a. Acids	To study the important U.S.P. and N.F. inorganic acids. Method of preparing, use and dose.	Practice of Pharmacy (Remington, 8th Ed. 1936)	L,C,D,E	(1)	1															

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Pharmacy Technicians

Technical

Detailed Program (Cont'd) Sec. III *par. 34*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5. (Cont'd)																				
b. Aromatic Waters	To study the important U.S.P. and N.F. aromatic waters. Methods of preparing, use, and dose.	Practice of Pharmacy (Remington, 8th. Ed. 1936) pp 274-281; TM 8-233, par. 69-85	L, C, D, E	(2)	2															
c. Syrups	To study the important U.S.P. and N.F. syrups. Methods of manufacture, use, and dose.	(Remington, pp. 287-308;) TM 8-233, par. 124-139	L, C, D, E	(2)	2															
d. Lotions and Mucilages	To study the important U.S.P. and N.F. lotions and mucilages. Methods of manufacture, use, dose, and methods of application.	Remington, pp. 309-310, 320-322; TM 8-233, par. 149-151 & par. 140-142	L, C, D, E	(1)	1															
e. Powders and Infusions	To study the important U.S.P. and N.F. powders and infusions. Methods of preparation, use, and dose.	Remington, pp. 475-480, 375-380; TM 8-233, par. 259-262, 198-200	L, C, D, E	(1)	1															
f. Spirits	To study the important U.S.P. and N.F. spirits. Methods of preparing, use, and dose.	Remington, pp. 327-336; TM 8-233, par. 156-171	L, C, D, E	(3)	3															
g. Fluidextracts	To study the important U.S.P. and N.F. fluidextracts. Methods of preparation, use, and dose.	Remington, pp. 415-444; TM 8-233, par. 229-241	L, C, D, E	(2)	1	1														
h. Mixtures	To study the important U.S.P. and N.F. mixtures. Methods of preparing, use, and dose.	Remington, pp. 316-318; TM 8-233, par. 143-146	L, C, D, E	(1)	1															

TRAINING PROGRAM FORM SG 425, AUG 10 1943

13-44355 22

Program for Pharmacy Technicians

Technical

Detailed Program (Cont'd) Sec. II, per. 134.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
5. (Cont'd)																		
1. Elixirs	To study the important U.S.P. and N.F. elixirs. Methods of manufacture, use and dose.	Practice of Pharmacy, (Remington, pp. 356-360;) TM 8-233, par. 172-185	I, C, D, E	(2)		2												
2. Liniments	To study the important U.S.P. and N.F. liniments. Methods of manufacture, use and methods of application.	Remington, pp. 365-369; TM 8-233, par. 190-195	I, C, D, E	(2)		2												
3. Emulsions	To study the important U.S.P. and N.F. emulsions. Methods of preparing, use and dose.	Remington, pp. 309-310, 1617-1637; TM 8-233, par. 117-123.	I, C, D, E	(2)		2												
4. Tinctures	To study the important U.S.P. and N.F. tinctures. Methods of preparing, use, and dose.	Remington, pp. 382-415; TM 8-233, par. 201-228	I, C, D, E	(2)		2												
5. Glycerites	To study the important U.S.P. and N.F. glycerites. Methods of preparation, use, and dose.	Remington, pp. 323-326; TM 8-233, par. 152-155	I, C, D, E	(1)		1												
6. Ointments	To study the important U.S.P. and N.F. ointments. Types of bases, methods, use, and methods of application.	Remington, pp. 492-506, 1794-1796; TM 8-233, par. 271-293	I, C, D, E	(2)		1	1											
7. Gargles, Pastes, Megmas	To study the important U.S.P. and N.F. gargles, pastes, and megmas. Methods of preparing, use, dose, and methods of application.	Remington, pp. 507-512, 319. TM 8-233, par. 294-296, 147-148.	I, C, D, E	(1)		1												



Program for Pharmacy Technicians

Technical

Detailed Program (Cont'd) Sec. III, par. 3 & 4.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
p. Liquors	To study the important U.S.P. and N.F. liquors. Methods of preparing, use, and dose.	Practice of Pharmacy, (Remington, 8th Ed., pp 281-286); TM 8-233, par. 86-116	L, C, D, E	(3)					3											
Collodions	To study the important U.S.P. and N.F. collodions. Methods of preparing, use, and dose.	Remington, pp. 363-364; TM 8-233, par. 186-189	L, C, D, E	(1)					1											
Suppositories	To study the methods of preparing suppositories, their types, and methods of introduction.	Remington, pp. 516-518; & 1741-1753; TM 8-233, par. 297-301	L, C, D, E	(2)						2										
Tablets and Extracts	To study the kinds of tablets and extracts, their manufacture, and uses.	Remington, pp. 1706-1740, 451-467; TM 8-233, par. 267-270, & 245-258	L, C, D, E	(1)						1										
6 Pharmacy, Prescription Study				15																
a. The Military Prescription and Prescription Latin	To acquaint the student with the form of a military prescription, its purpose, and component parts. To teach Latin noun endings as applies to prescriptions and familiarize the student with common Latin abbreviations and their English meaning.	TM 8-233, par. 309-310, 3, 11, 316; Remington, pp 1578-1604	L, C, E	(1)							1									

TRAINING PROGRAM FORM SG 420, AUG 10 1943

Program for Pharmacy Technicians

Technical

Detailed Program (Cont'd) Sec. II p. 134.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
6. (Cont'd)																				
b. Liquid Prescription	To teach the proper method of combining ingredients in liquid prescriptions, using knowledge gained in U.S.P. and N.F. study. Prescriptions containing soluble and insoluble material are considered.	TM 8-233, par. 317-318; Remington, pp. 1605-1616	L, C, D, E	(2)							2									
c. Powders and Capsules	To instruct in the proper method of mixing powders, preparing chartules, and filling capsules.	TM 8-233, par. 321-324; Remington, pp. 1675-1695	L, C, D, E	(3)								3								
d. Ointments and Suppositories	To teach the proper method of preparing ointments and suppositories as prescriptions.	TM 8-233, par. 319-320. Remington, pp. 1741-1766	L, C, D, E	(3)									3							
e. Incompatibilities in Prescriptions																				
Therapeutic	To define and consider the fundamentals of therapeutic incompatibilities. Emphasis is placed on excessive dosage, and the disposition of such prescriptions.	TM 8-233, par. 313-315a. Remington, pp. 1771-1773	L, C, E	(2)										2						
(2) Physical	To define and discuss the common physical incompatibilities occurring in prescriptions. Methods of overcoming and/or disposition.	TM 8-233, par. 315b. Remington, pp. 1773-1796	L, C, E	(3)										1	2					

TRAINING PROGRAM FORM 56 428, AUG 10 1943

Technical

Detailed Program (Cont'd) Sec. III par. 134

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
6. (Cont'd)																				
(3) Chemical	To define and discuss the common chemical incompatibilities occurring in prescriptions. Methods of overcoming and/or disposition.	TM 8-233, par. 315c, Practice of Pharmacy, (Beaumont, 8th Ed.) pp 1773-1796	L, C, E	(4)																
7. Pharmacy Mathematics				36																
a. Fractions	A review of addition, subtraction, multiplication, and division of simple fractions.	Arithmetic of Pharmacy, (Stevens, 5th Ed.) pp. 7-12	L, C, E	(1)	1															
b. Decimals	Definition of decimals. Conversion of fractions into decimal. Addition, subtraction, multiplication, and division of decimals.	Arithmetic of Pharmacy, (Stevens, 5th Ed.) pp. 8-15	L, C, E	(2)	2															
c. The Metric System	Explanation of the metric system, with emphasis on weights and measures. The student must commit to memory the metric table of weights and measures.	TM 8-233, par. 5. (Stevens, pp. 1)	L, C, E	(4)		2	1													
d. Apothecary System	Explanation of the apothecary system of weights and measures. The student must commit to memory the apothecary table of weights and measures.	TM 8-233, par. 6. (Stevens, pp. 2)	L, C, E	(3)			2	1												
e. Avoirdupois System	Explanation of the avoirdupois system of weights and measures. The student must commit to memory the avoirdupois table of weights and measures.	TM 8-233, par. 7. (Stevens, p. 2)	L, C, E	(2)				2												
TRAINING PROGRAM FORM 36 426, AUG 10 1942																				



Program for Pharmacy Technicians

Technical

Detailed Program (Cont'd) See *pp. 134*.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7. (Cont'd)																				
f. Approximate Equivalents	To assure a knowledge of the equivalent weight or volume of substances in the different systems. The student must commit to memory the important equivalents.	TM 8-233, par. 8-9. Arithmetic of Pharmacy, (Stevens, 5th Ed.) pp. 3-4	L. C. E	(3)					3											
g. Conversion of Weights & Measures	To teach the method of converting from one system to another, using the approximate equivalents.	Stevens, pp. 17-20	L. C. E	(3)					3											
h. Reducing and Enlarging Formulas	To explain the methods of calculating quantities in reduced or enlarged formulas.	TM 8-233, par. 29-31	L. C. E	(1)						1										
i. Calculation of Dosage	Methods of calculating individual quantities of ingredients based on total quantity of formula and dosage.	TM 8-233, par. 33	L. C. E	(2)						2										
j. Calculation of Dosage for Children	Methods of calculating doses for children when adult dose is given, using accepted rules.	TM 8-233, par. 32	L. C. E	(1)							1									
k. Percentage	To assure a knowledge of the fundamentals of percentage as a basis for percentage solutions.	TM 8-233, par. 22	L. C. E	(1)							1									
l. Ratio and Proportion	To assure the meaning of, and method of working problems in, ratio and proportion.	TM 8-233, par. 19-21. Stevens, pp. 49-51	L. C. E	(1)							1									
m. Percentage Solutions	To teach the student to prepare percentage solutions. W/W, V/V, and W/V are considered. Emphasis is placed on the preparation of W/V solutions.	TM 8-233, par. 22-24. Stevens, pp. 53-54	L. C. E	(3)																
TRAINING PROGRAM FORM 36 428, AUG 10 1943																				

TRAINING PROGRAM FORM 36 428, AUG 10 1943

## Program for Pharmacy Technicians

Technical

Detailed Program (Cont'd) Sec. III, p. 134

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7. (Cont'd)																				
n. Stock solutions and titrations	To teach the method of preparing stock solutions and titrations.	TM 8-233, par. 25. Stevens, pp. 59-60	I, C, E	(3)														3		
o. Thermometers	To acquaint the student with the centigrade and Fahrenheit systems of measuring temperature and methods of conversion from one to the other.	TM 8-233, par. 17-18. Stevens, pp. 21-27	I, C, E	(1)														1		
p. Specific Gravity	Definition and meaning of specific gravity. Method of determination. Method of calculating volume & weight when specific gravity is known.	TM 8-233, par. 11-14. Stevens, pp. 28-40	I, C, E	(2)														2		
q. Alligation	Method of preparing solutions of known strength from other solutions.	TM 8-233, par. 27-28. Stevens, pp. 67-78	I, C, E	(2)														2		
r. Review	Review of all phases of pharmaceutical mathematics.	All previous references	C	(1)														1		
8. Chemistry				36																
a. General and Inorganic Chemistry																				
(1) Introduction and Matter	Definition and purpose of course; definition and forms of matter.	General Chemistry I, C, E Smith & Kendall, pp. 3-28; TM 8-233, par. 34-35	I, C, E	(1)	1															
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Pharmacy Technicians

Technical

Detailed Program (Cont'd) *Sec. IV per 134.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8. (Cont'd)																				
(2) Physical & Chemical Change	Definition and examples of physical and chemical change. Detailed discussion of different types of chemical change.	General Chemistry I, C, E Smith & Kendall, pp. 26-37, 250-252; TM 8-233, par. 55		(2)	2															
(3) Atomic Theory	Explanation of atomic theory, atomic weights, molecular weights, electrons, and ions.	General Chemistry, I, C, E Smith & Kendall, pp. 48-67; TM 8-233, par. 45		(2)	2															
(4) Symbols, Formulae & Equations	Derivation of formulae; information contained in a symbol or formula; writing and balancing equations.	General Chemistry, I, C, E Smith & Kendall, pp. 66-77		(2)	1	1														
(5) Valence	Positive and negative valence; change of valence; nomenclature of compounds; equivalent weights; relationship of valence to chemical activity.	General Chemistry, I, C, E Smith & Kendall, pp. 128-137; TM 8-233, par. 47		(2)	2															
(6) Oxygen & Hydrogen	Detailed discussion of the occurrence, preparation, physical and chemical property of oxygen and hydrogen. Explanation of oxidation and reduction.	General Chemistry, I, C, E Smith & Kendall, pp. 76-95, 113-127, 311-313; TM 8-233, par. 55		(1)	1															
(7) Acids, Bases, Salts, and Neutralization	Definition and examples of acids, bases, and salts; explanation of neutralization; action of radicals.	General Chemistry, I, C, E Smith & Kendall, pp. 249-268; TM 8-233, par. 51-54		(2)	2															

TRAINING PROGRAM FORM 56 428, AUG 10 1943



## Program for Pharmacy Technicians

## Technical

## Detailed Program (Cont'd) Sec. III, p. 134.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5. (Cont'd)																				
(5) The Halogens	Chemical reaction of members of this group; consideration of compounds important in pharmacy.	General Chemistry, L.C.E. Smith & Kendall, pp. 207-220, 286-300	L.C.E.	(1)						1										
(6) Nitrogen & Ammonia	To assure a knowledge of the properties of these elements and their compounds important in pharmacy.	General Chemistry, L.C.E. Smith & Kendall, pp. 403-416	L.C.E.	(1)						1										
(10) Phosphorus, Arsenic, Antimony & Bismuth	To assure a knowledge of the properties of these elements and their compounds important in pharmacy.	General Chemistry, L.C.E. Smith & Kendall, pp. 429-439	L.C.E.	(1)						1										
(11) Sodium, Potassium & Sulfur	To assure a knowledge of the properties of these elements and their compounds important in pharmacy.	General Chemistry, L.C.E. Smith & Kendall, pp. 316-328, 561-570	L.C.E.	(2)							2									
(12) Calcium, Magnesium, Zinc & Aluminum	To assure a knowledge of the properties of these elements and their compounds used in pharmacy.	General Chemistry, L.C.E. Smith & Kendall, pp. 571-598	L.C.E.	(1)							1									
(13) Copper, Mercury, Iron, Lead & Silver	To assure a knowledge of the properties of these elements and their compounds used in pharmacy.	General Chemistry, L.C.E. Smith & Kendall, pp. 599-629	L.C.E.	(1)								1								
b. Organic Chemistry																				
(1) Fundamental Principles of Organic Chemistry	Definition; structure of organic compounds and nomenclature.	Principles of Pharmacy, L.C.E. Smith & Kendall, pp. 631-688; TM 8-233, par. 56-57.	L.C.E.	(1)																
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Pharmacy Technicians

Technical

Detailed Program (Cont'd) Ser. # 134.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
8b (Cont'd)															
(2) The Aliphatic Series	Structure, typical reactions, and nomenclature of the compounds of this series.	Principles of Pharmacy, Army & Fischell, pp. 639-709; TM 8-233, par. 58	I, C, E	(4)							1	3			
(3) Drugs of the Aliphatic Series	To assure a knowledge of the compounds of this series important in pharmacy.	Principles of Pharmacy, Army & Fischell, pp. 639-709; TM 8-233, par. 58	I, C, E	(4)									3	1	
(4) The Aromatic Series	Structures, typical reactions, and nomenclature of the compounds of this series.	Principles of Pharmacy, Army & Fischell, pp. 839-871; TM 8-233, par. 58	I, C, E	(2)										2	
(5) Drugs of the Aromatic Series	To assure a knowledge of the compounds of this series important in pharmacy.	Principles of Pharmacy, Army & Fischell, pp. 839-871; TM 8-233, par. 58	I, C, E	(4)											3
(6) Alkaloids & Glucosides	Properties and typical reactions of alkaloids; individual consideration of members of this group important in pharmacy.	Principles of Pharmacy, Army & Fischell, pp. 715-723, 898-943; TM 8-233, par. 58	I, C, E	(2)											1
															2





Program for Pharmacy Technicians

Technical

Detailed Program (Cont'd) Sec. III pgs. 134.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9. (Cont'd)																				
e. Drugs acting on the Urinary System	Physiology of the urinary tract, definition of terms, study of important drugs acting on the urinary tract, their derivation, properties, use, and dose.	Solomon, pp. 433-507; TM 8-233, par. 304	L, C, E	(2)										1		1				
h. Antisymbiotics, sulfonamides, & Penicillin	A study of the compounds used in the treatment of syphilis. Familiarization with the various sulfonamides and their actions and dose. Action, method, of administration, use, and dose of penicillin.	Solomon, pp. 597-607	L, C, E	(1)												1				
i. Vitamins	Familiarization with the vitamins, their derivation, use, properties, and deficiency diseases.	Solomon, pp. 597-607	L, C, E	(1)												1				
j. Biological Products	Study of important biological products including gland products and immunizing agents, definition of terms, methods of preparing, uses and doses.	Solomon, pp. 619-640	L, C, E	(2)													2			
k. Posology and Toxicology	Factors modifying doses of drugs. General and special methods of treatment of poisoning.	Solomon, pp. 674-684; TM 8-233, par. 305-308 and 315	L, C, E	(1)													1			
l. Administration & Supply		Medical Supply Catalogue; TM 8-233; AR 40-590	L, C	4																
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Pharmacy Technicians

Technical

Detailed Program (Cont'd) Sec. II, p. 134.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
10. (Cont'd)																				
a. General	Discussion of conduct in the pharmacy; relationship between the pharmacy technicians, medical officer and patient; responsibility and duties of the pharmacy, and MOO in charge of the pharmacy, and the technician; arrangement of the pharmacy.	TM 8-233, par. 332-334; AR 40-590, par. 17	L, C	(1)																
b. Supply and Records	Explanation of the Medical Supply Catalogue; method of requisitioning standard and non-standard items; property accountability and responsibility; storage and records of narcotics; alcohol, and alcoholic liquors; filing of prescriptions.	TM 8-233, par. 335; AR 40-590, par. 17, Medical Supply Catalogue	L, C	(3)																
11. Pharmacy Laboratory				284																
a. Manufacture of U.S.P. and N.F. preparations	Actual preparation of about 90 U.S. P. and N.F. preparations that are commonly used in military pharmacy. This phase of instruction should be coordinated with the lectures in general and galenical pharmacy in order that the student will manufacture the preparation as soon as possible after it is discussed in the lecture course.	All previous references	AE	(144)																

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Pharmacy Technicians

Technical

Detailed Program (Cont'd) paf. 13b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
11. (Cont'd)																				
b. Prescription Compounding																				
(1) Compatible Prescriptions	Actual compounding of about 90 compatible prescriptions. This phase of instruction should be coordinated with the lectures in pharmacy, prescription compounding in order that the student will be compounding the type prescription being discussed in the lecture course.	All previous references.		(72)								24	24	24						
(2) Incompatible Prescriptions	Actual compounding of about 50 prepared prescriptions containing common incompatibilities with a view to their detection and disposition. All available references books on this subject should be at the disposal of the student.	All previous references		(66)											24	22	22			
Time Reserved for the Commandant				24	2	2	2	2	2	2	2	2	2	2	2	2	2			
TOTAL HOURS				456	36	36	36	36	36	36	36	36	36	36	36	36	36			

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Combined Program for Veterinary Technicians and Meat and Dairy Hygienists

Summary Program per. 14 d.

Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>TECHNICAL</b>																				
4. Veterinary Anatomy and Physiology	The normal structure and composition of the body of the horse and the normal function of his body organs	TM 25-5; TM 8-200; AR 40-2250; FS 8-38; (Anatomy of the Domestic Animal, Sisson)	L, C, D, AE	20	20															
5. Veterinary Hygiene and Sanitation	Hygiene and sanitary measures essential in preserving animal health.	TM 25-5; TM 8-40; TM 8-220; AR 40-2090; FS 2-13	L, C, D, AE	14	14															
6. Veterinary Emergency Medical Treatment	The diagnosis of common diseases and injuries and the proper procedure in applying emergency treatment.	TM 25-5; TM 8-220; FS 8-7; FS 8-41; FS 8-45; FS 8-49	L, C, D, AE	40	2	36	2													
7. Minor Surgery and Operating Room Technique	The use, care and sterilization of veterinary instruments; restraint of animals; pre and post operative care.	TM 8-220	L, C, D, AE	12			12													
8. Veterinary Bacteriology and Parasitology	The identification and classification of common bacteria and parasites.	TM 8-227; AR 40-2140	L, C, D, AE	18			18													
TRAINING PROGRAM FORM SG 426, AUG 10 1943																				

Combined Program for Veterinary Technicians & Meat & Dairy Hygienists

Summary Program (Cont'd) 14a

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
9. Pharmacology	The identification of drugs, their action, indication and dosage.	TM 8-223	I, C, D, AE	30			4	26										
10. Horseshoeing	The fundamentals of normal and corrective shoeing.	TM 25-5; TM 8-220; 79 2-9	I, C, D, AE	8				8										
11. Roentgenology	I-Ray apparatus; its use and safety factors.	TM 8-240; TM 8-275	I, C, D, AE	15				2	13									
12. Veterinary Reports (Animal Service)	The purpose and use of the various Medical Department Veterinary reports of the animal service.	TM 8-450; AR 40-2235; 40-245, 40-2270	I, C, D, AE	30					23	7								
13. Forage and Grain Inspection	The classification and analysis of hay, straw and grain; their storage and sampling.	AR 40-2035; (Handbook of Official Grain Standards, U.S. Dept. Agriculture; Hay Inspection Manual, U. S. Dept. Agr.)	I, D, C, AE	22						22								
1. Veterinary Reports, General	Purpose and preparation of statistical reports; supply requisition and property accounts.	TM 8-450; AR 40-2235; AR 35-6520; 6560, 6620, 6680, 6640, 6720, 40-1765.	I, C, D, AE	7						7								

Combined Program for Veterinary Technicians & Meat & Dairy Hygienists

Summary Program (Cont'd) 14a

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
15. Meat and Dairy Hygiene	The inspection of foods of animal origin and establishments supplying them.	TM 8-220; TM 8-227; L.C. TM 8-450; TM 10-210; TM 10-250; TM 10-405; AR 40-2000 series (Federal Specifications; Meat Hygiene, Edleman; Military Meat & Dairy Hygiene, Bekin; U.S. Public Health Bulletin #220; Market Milk Industry) Roadhouse and Henderson; Regulations Governing Meat Inspection of U.S. Dept. of Agriculture; Sausage and Ready to-serve Meats; Beef, Lamb and Veal Operations, Institute of Meat Packing.		216								36	36	36	36	36																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															



Combined Program for Veterinary Technicians and Meat and Dairy Hygienists

Detailed Program No. 14b.

Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK																
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
<b>TECHNICAL</b>																					
4. Veterinary Anatomy and Physiology				20																	
a. Introduction	General introduction to anatomy and physiology; anatomical terms.	FM 25-5, Par. 84-89; TM 8-220, Par. 53, 101, 102, 105, 107, TS 8-38.	L, C, D	(2)	2																
b. External regions	Identification and nomenclature of the external regions of the horse.	FM 25-5, Par. 84; AB 40-2250.	C, D, AE	(2)	2																
c. Skeleton	Parts of the skeleton; function and position of bones.	FM 8-220, Par. 63-67, 103, 107; (Slisson's Anatomy, pp. 20-25).	L, D	(2)	2																
d. Joints and Ligaments	Structure and function of joints and ligaments.	FM 8-220, Par. 25-50; (Slisson's Anatomy, pp. 207-243).	L, D	(2)	2																
e. Muscles and tendons	Structure and function of muscles and tendons.	FM 8-220, Par. 81-87; (Slisson's Anatomy, pp. 253-343).	L, D	(2)	2																

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Veterinary Technicians and Meat and Dairy Hygienists

Technician 1

Detailed Program (cont'd) Sec. III/4A.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
4. (cont'd)																		
f. Circulatory system	Structure and function of the heart, TM 8-220, par. 97-109; (Sisson's Anatomy, pp. 614-704).	TM 8-220, par. 97-109; (Sisson's Anatomy, pp. 614-704).	L,D	(2)	2													
g. Respiratory system	Structure and physiology of respiration. TM 8-220, par. 96-98; (Sisson's Anatomy, pp. 508-536).	TM 8-220, par. 96-98; (Sisson's Anatomy, pp. 508-536).	L,D	(2)	2													
h. Digestive system	Anatomy of the digestive system; physiology of digestion. TM 8-220, par. 86-94; (Sisson's Anatomy, pp. 385-444).	TM 8-220, par. 86-94; (Sisson's Anatomy, pp. 385-444).	L,D	(2)	2													
i. G-U system	Structure and physiology of the genito-urinary system, excretion of waste. TM 8-220, par. 564-662, 671-686; (Sisson's Anatomy, pp. 780-834, 857-896).	TM 8-220, par. 564-662, 671-686; (Sisson's Anatomy, pp. 780-834, 857-896).	L,D	(2)	2													
j. Nervous system	Anatomy and physiology of the nervous system, including the special senses. TM 8-220, par. 55-59, 100; (Sisson's Anatomy, pp. 780-834, 857-896).	TM 8-220, par. 55-59, 100; (Sisson's Anatomy, pp. 780-834, 857-896).	L,D	(2)	2													
6. Primary Hygiene and Sanitation				14														
a. Stable construction, ventilation, and sanitation factors in conducting inspection.	Stable construction, stressing adequate ventilation and maintenance of sanitary conditions; important factors in conducting inspection. TM 26-5, par. 91-124; TM 8-40, par. 1-4, and c1, par. 232-234.	TM 26-5, par. 91-124; TM 8-40, par. 1-4, and c1, par. 232-234.	L	(3)	3													
b. Stable inspection	On-the-job inspection of stables.	All previous references.	AE	(3)	3													

## Detailed Program (cont'd) See III p. 144

[illegible]



Detailed Program (cont'd) *See III per 144.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
6. (cont'd)																				
(2) Bandages	Classification of bandages, use of each type and method of applying.	TM 8-220, par. 166	C, D	(2)		2														
(3) Clinical study	Practical application of bandages and first aid measures in a veterinary hospital.	All previous references	AE	(12)		12														
e. Common Diseases																				
(1) Symptoms and diagnosis	Classification of common diseases; symptoms of each.	FM 25-5, par. 143+ 151; TM 8-220, par. 166, 172-179.	L, D	(3)		3														
(2) Clinical study	Practical application in the care and treatment of animals in a veterinary hospital.	All previous references	AE	(7)		7														
f. Communicable																				
	Classification of the more common communicable diseases; their treatment; control methods applied; isolation and disinfection methods.	FM 8-40, C-1, par. 235-238, TM 8-220, par. 179, 272-289; AR 40-2090.	L, D	((4)		2		2												
7. Major Surgery and Operating Room Technique																				
a. Operating room	The care and sterilization of instruments; maintenance of operating room equipment.	TM 8-220, C-1, par. 185.01-185.07	L, D	(2)		2														
b. Pre-operative care	Preparation of operating room and instruments; restraint of animal; preparation of patient for operation.	TM 8-220, C-1, par. 185.08-185.10.	L, D	(1)		1														
TRAINING PROGRAM																				
FORM SG 428, AUG 10 1943																				

# Veterinary Pathology and Meat and Dairy Hygiene

Revised Program (cont'd) Sec. 44, par. 1, 1943

SUBJECT	SCORE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
					15	16												
7. (cont'd)																		
c. Post-operative care	Isolation, treatment, procedure of carrying for patients following operation.	IN 8-220, C-1, par. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.	L, D	(1)			1											
d. Operative procedure	Common operative procedures; sutures; dressings.	IN 8-220, par. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.	L, D	(1)			1											
e. Clinical study	Actual application of the common operative procedures in veterinary hospital.	All previous references	D, AE	(7)			7											
8. Veterinary Pathology and Bacteriology				10														
a. Bacteriology	The fundamentals of bacteriology and immunology.	IN 8-227, par. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.	L, D, AE	(2)			2											
b. Bacteriology	Hygienic methods of isolating bacteria; culture media; staining methods; microscopic examination.	IN 8-227, par. 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.	L, D, AE	(4)			4											
c. Bacteriology	Identification and classification of the common bacteria affecting animals.	IN 8-227, par. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.	L, D, AE	(4)			4											
d. Bacteriology	Identification and classification of common diseases affecting animals.	IN 8-220, par. 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.	L, D, AE	(4)			4											

Detailed Program (cont'd) See III part 1 & 2.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8. (Cont'd)																				
e. Sterilization	Sterilizers and their care; correct procedures in sterilization.	TM 8-227, par. 130-135, 229-230.	L,D	(2)		2														
f. Laboratory	Procedure in selecting, packing and shipment of specimens for laboratory analysis.	TM 8-227, par. 483-486; AR 40-2140.	L,D	(2)		2														
9. Pharmacology				30																
a. Metrelogy	Metric weights and measures; apothecary equivalents; reducing and enlarging formulas.	TM 8-233, par. 3-10.	L,D	(3)		3														
b. Equipment; Laboratory procedure	Use of equipment; compounding drugs.	TM 8-233, par. 69-68	D,AE	(3)		1	2													
c. Pharmaceutical preparations	Compounding and dispensing solutions; lotions; spirits; etc.	TM 8-233, par. 11-81, 69-85, 86-258.	D,AE	(4)			4													
(1). Solutions																				
(2). Liniments and tinctures	Compounding and dispensing of liniments and tinctures.	TM 8-233, par. 11-31, 69-85, 86-258.	D,AE	(4)			4													
(3). Ointments	Compounding and dispensing ointments.	TM 8-233, par. 271-293.	D,AE	(3)			3													
(4). Powders	Compounding and dispensing powders.	TM 8-233, par. 259-262.	D,AE	(3)			3													
(5). Emulsions	Compounding and dispensing emulsions.	TM 8-233, par. 117-123.	D,AE	(2)			2													

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Detailed Program (cont'd) See III par. 144.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
9. (cont'd)															
d. Dosage and administration of drugs	Dosage of various drugs and channels	TM 8-253, C-1, par. L, D, 337-340	AE	(3)			3								
e. Properties, action and purpose of drugs.	The physical properties, action and purpose of administering certain drugs.	TM 8-253, C-1, par. L 341.		(3)			3								
f. Toxicology	Poisons, including symptoms produced and antidotes.	TM 8-253, par. 306-308.	L	(2)			2								
10. Horseshoeing				8											
a. The foot	The anatomy of the foot; its normal physiological movements and functions.	TM 25-6, Ch. 3, L, D TM 2-220, par. 2-41; TM 8-220, par. 103-110.		(4)			4								
b. Shoeing	Fundamentals of normal and corrective shoeing.	TM 25-6, par. 152- L, D 162; TM 2-220, par. 41-107; PS 2-8.		(4)			4								
11. Roentgenology				15											
a. Orientation	Elementary electricity and physics; scope and function of the X-ray machine.	TM 8-240, par. 1-7. L		(2)			2								
b. X-ray machine	Functioning principles; component parts; wiring arrangements and care of machine.	TM 8-240, par. 8- L, D 25.		(2)				2							

Detailed Program (cont) *Sec. III par. 146.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
11. (cont'd)															
c. X-radiation hazards	The hazards of using; protective measures.	TM 8-240, par. 37-39; TM 8-275, par. 62-70.	L	(1)					1						
d. Restraint and position- ing.	The correct methods of restraining and positioning animals for X-ray exposures.	TM 8-240, par. 48-50.	L,D	(2)					2						
e. Exposures	Procedure in taking x-ray pictures; application in veterinary hospital.	TM 8-240, par. 26-50; TM 8-275, par 16-26.	D,AE	(4)					4						
f. Dark room equipment	Method of handling and processing film; essential equipment.	TM 8-240, par. 43-45.	L,D	(2)					2						
g. Field X-ray equipment	Review of x-ray equipment including discussion of field x-ray equipment.	TM 8-275, par. 16-28. All previous references	L,D	(2)					2						
12. Veterinary Reports (Animal Carcass)				30											
a. Orientation ports.	Purpose and scope of veterinary reports.	TM 8-450, C-1; AR 40-2255; Report Forms.	L,D	(1)					1						
b. Official Nomenclature	The study of official nomenclature for diseases and injuries.	TM 8-450, C-1; AR 40-2245.	L,D,AE	(3)					3						
c. Application	Application of the official nomenclature to various diseases and injuries reported in hospital.	TM 8-450, C-1; AR 40-2245.	D,AE	(3)					3						





Detailed Program (cont'd) See III per 146.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
13. Forage and grain inspection				22																
e. Grain analysis	"Grain Standardization Act," classes and grades of grain; moisture determination.	AR 40-2035, Sec V; (Handbook of Official Grain Standards, U.S. Dept. of Agr.)	L,D,AE	(4)							4									
b. Corn	Factors affecting the grade of corn	AR 40-2035, Sec. V; (Handbook of Official Grain Standards, U.S. Dept. of Agr.).	L,D	(2)							2									
c. Straw	The standards of straw; factors determining.	(Hay Inspection Manual, U.S. Dept. of Agr.).	L,D	(2)							2									
d. Hay	"Federal Hay Standards"; factors affecting classes and grades of timothy, alfalfa, prairie hay, mixed hay, etc.	(Hay Inspection Manual, U.S. Dept. of Agr.).	L,D,AE	(4)							4									
e. Color determination	Factors to be considered in color determination in hay groups; foreign material.	(Hay Inspection Manual, U.S. Dept. of Agr.).	L,D,AE	(2)							2									
f. Grasses	Factors affecting the class and grade of grasses.	(Hay Inspection Manual, U.S. Dept. of Agr.).	L,D,AE	(2)							2									
g. Review	General review and actual grading of grain and hay.	All previous references.	AE	(4)							4									

TRAINING PROGRAM FORM SG 426, AUG 19 1943

Detailed Program (Cont'd) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
13. (Cont'd)															
b. Key Certificates	Purpose and preparation of key certificates.	(Key Inspection Manual, U.S. Dept. of Agriculture.)	I, D, AE	(2)						2					
Veterinary Reports, General				7											
a. A.C.O. Form 8-19; 8-19a	Purpose and preparation of the Statistical Report.	TM 8-450, C-1; AR 40-2235; V.D. Cir. 236; Blank forms.	I, D, AE	(3)						3					
b. Property accounts-bill	Preparation of forms relating to property accounts and supply functions.	AR 35-6520, 6560, 6620, 6640, 6680, 6720; AR 40-1775; Blank forms.	I, D, AE	(4)						4					
15. Meat & Dairy Hygiene				216											
a. Orientation	The scope, authority, purpose, relation to purchasing officers and other official inspection agencies.	TM 8-450, Sec. I; AR 40-2000 series	I	(1)						1					
b. Regulation	Purpose of inspection in detail study of Army Regulations governing M.D.H. inspection.	TM 8-270, par. 384; 385; TM 8-450, par. 26-31; TM 10-210, par. 73; AR 40-2000 series; AR 40-2140, par. 1-5.	I, C	(2)						2					

Detailed Program (cont'd) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
15. (Cont'd)																				
c. Field Headquarters & master market center operations	Methods of handling purchase orders; interpretation of Federal Specification; procurement of perishable substance.	TM 8-220, C-1, par. 402; Federal Specification; (Veterinary Procedure guide, prepared by Field Headquarters in mimeographed form).	I, C, D	(2)								2								
d. Inspection																				
(1) Classes	Study of the (9) nine classes of inspection; purpose of each.	AR 40-2150, par. 17; AGO form 8-134.	I, D	(4)								4								
(2) Application	Procedures for each class of inspection; factors relating to each class.	AR 40-2150; AGO form 8-134	I, D	(4)								4								
e. A.G.O. Form 8-134																				
(1) Code classifications	Classification of all meat and dairy products by code number.	AR 40-2150; AGO forms 8-134	I, D	(4)								4								
(2) Preparation of Report	Actual preparation of the Report of Meat and Dairy Hygiene.	AR 40-2150; AGO form 8-134.	I, D, AE	(6)								13	3							

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Detailed Program ((don't) 14h.

SUBJECT	SCORE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
f. Sanitary Inspection																				
(1) Establishment	Sanitary standards for packing plants acceptable to the Army; scope of inspection; inspection procedure.	AR 40-2150, Sec. III. (Meat Hygiene, Sherman, pp. 110-114, 396-405.) (Military Meat and Dairy Hygiene, Dethlefs, pp. 13-16)	I	(2)							2									
(2) On-the-job study	Actual inspection of packing plant establishment.	All previous references.	I, AE	(4)							4									
g. Refrigeration	A study of the need for refrigeration; its application to the production, storage, transportation and handling of Army subsistence supplies.	TM 8-450, par. 41; TM 8-305, par. 35; TM 10-610; TM 10-615.	I, C	(4)							4									
h. Beef, fresh																				
(1) Grading	Important factors in grading and classifying carcasses beef.	TM 10-210, par. 175 (C.Q.D. 161-current issue). (Meatall specifications TM 3-220 carcass surface). (Beef, Lamb and Veal operations. Instructions of Meat Packing, pp. 32-45.)	I, C, D	(2)								2								

TRAINING PROGRAM FORM SEE 42E, AUG 100 11948

Detailed Program (Cont) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
14b. (Cont)																				
(2) Storage	Method of chilling, storing and shipping carcass beef.	TM 10-250, par. 45; (Beef, Lamb and Veal operations, Institute of Meat Packing, pp. 44-57.)	L, C, D	(2)								2								
(3) Beef Cuts	Wholesale and retail cuts of beef; location of the various cuts on the carcass with approximate percentage of each; use for which cuts are best adapted.	TM 10-407; TM 10-405, par. 14-17; TF 10-1134; TF 10-1135; (Beef, Lamb, and Veal operations, Institute of Meat Packing, pp. 58-69.)	L, C, D	(4)								4								
(4) Beef, bone-less frozen	Development of frozen bone-less beef; its importance to Army, specification requirements; selection; cutting; packaging; storage; shipping.	TM 10-407, par. 67; (C.Q.D. No. 11, current issue); (spec. No. PP-B-236, current series); (Military Meat and Dairy Hygiene, Barkins, pp. 130-136.)	C, D	(4)								4								

TRAINING PROGRAM FORM SG 426, AUG 10 1943

Detailed Program (Cont'd) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK									
					1	2	3	4	5	6	7	8	9	10
15. (Cont)														
(5) Beef for processing (Army)	Types and grades of beef acceptable to Army for processing purposes; boning; trimming; packaging; drying; important factors in inspection.	C.G.T. No. 405, current issues	C,D	(4)										
(6) Inspection	Method of conducting inspections for all types of beef incident to procurement, during processing, while in storage, and at issue; factors indicative of age and spoilage.	TM 10-210, par. 74; AR 40-2150; W.D. Cir. 109; (O.G.M.G. Cir. 170). (Military Meat and Dairy Hygiene, Bakins, pp. 276-287)	L,D	(3)										
(7) On-the-job study	Student application in grading beef; inspection procedures.	All previous references.	C,AE	(8)										
1. Veal														
(1) Grading	Important factors in grading veal for class and grade; selection of veal carcasses for Army use; specifications.	TM 10-405, par. 24; TM 10-210, par. 77. (Beef, Lamb and Veal operations, Instructions of Meat Packing, pp. 102-112). Spec. No. PP-V-191, current series.)	L,D	(3)										



Detailed Program (Cont'd) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
151. (Cont'd)																				
(2) Veal Cuts	Wholesale and retail cuts of veal.	TM 10-405, par. 25. (Military Meat and Dairy Hygiene, Watkins, pp. 164-170)	L, D	(2)										2						
(3) Inspection	Sanitary procedures in processing; factors affecting suitability of veal for Army uses.	Spec. No. PP-V-191, current series; (Military Meat and Dairy Hygiene, Watkins, pp. 153-164)	L, D	(1)										1						
J. Lamb																				
(1) Grading	Types, classes and grades of lamb carcasses.	TM 10-210, par. 78-79; TM 10-405, par. 18-19; (Spec. No. PP-I-91, current series); Beef, Lamb and Veal operations, Institute of Meat Packing, pp. 113-127).	L, D	(3)										3						
(2) Cuts; Inspection	Wholesale and retail cuts; factors determining age and quality.	TM 10-405, par. 19, (Spec. No. PP-I-91, Current series); (Military Meat and Dairy Hygiene, Watkins, pp. 179-183.)	L, D	(3)										3						
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Detailed Program (Cont'd) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK												
					1	2	3	4	5	6	7	8	9	10	11	12	13
15. (Cont'd)																	
k. Pork																	
(1) Grading	Grading factors for pork; specification requirements.	TM 8-210, par. 76; (Spec. No. PP-8-571, current series); (Pork Operations; American Meat Institute, pp. 7-21); (Military Meat and Dairy Hygiene, Watkins, pp. 183-204).	L,D	(4)													
(2) Cuts	Wholesale and retail cuts; sanitary measures in processing pork; inspection procedures.	TM 10-405, par. 20-21; (Pork Operations, American Meat Institute, pp. 139-219). (Military Meat & Dairy Hygiene, Watkins, pp. 204-223). TF 10-1137.	L,D	(3)													
1. Fancy Meats	Grading factors in selection of livers, hearts, sweetbreads and other edible variety meats; factors in inspection procedure.	TM 10-210, par. 80; Spec. No. PP-B-656, 661; PP-B-201; PP-L-351; PP-L-351; PP-8-871; PP-L-576, current series; (Beef, Lamb & Veal operations, Institute of Meat Packing, pp. 140-147)	L,D	(2)													

Veterinary Technicians & Meat & Dairy Technicians

Detaild Program (Cont'd) 14 b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
15. (Cont'd)																				
m. On-the-job study	Student application in grading veal, lamb and pork; cuts; inspection factors in determining fitness for human consumption.	All Previous References	C, AE	(8)								8								
3. Sausage																				
(1) Manufacture	Factors relating to sausage making; types of sausage; raw materials used in each; trimmings; types and requirements of sausage used by the Army.	TM 8-220, par. 398; TM 10-210, par. 82; (Sausage and Ready to-serve meats. Institute of American Meat Packers, pp. 1-40, 57-225.)	C, D	(4)								4								
(2) Inspection	Army specification for sausage; sanitary procedures in manufacture; requirements for sausage used by the Army; factors in determining deterioration in storage.	Spec. No. PP-S-71, 74, 78, 81, 86, 91, 96, 101, current series; (Military Meat & Dairy Hygiene, Watkins, pp. 446-453.)	L, D	(3)								3								
(3) On-the-job study	On-the-job study of sausage manufacture; selection of raw material; inspection procedures during manufacture and in storage.	All previous references.	C, D	(4)								2	2							
TRAINING PROGRAM FORM SG 426, AUG 10 1943																				



Detailed Program (Cont'd) 14b

SUBJECT	SCORE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
15. (Cont'd)															
o. Smoked and Cured Meats															
(1) Types; cures	Various types of cured meats; curing processed specifications; types used by Army.	TM 8-220, par. 357; TM 10-210, par. 81; (Meat Hygiene, Edelmann, pp. 407-414); (Military Meat & Dairy Hygiene, Bakins, pp. 288-356); (Beef, Lamb and Veal operations, Institute of Meat Packing, pp. 148-156).	L, D	(4)										4	
(2) Packaging, Storing, Shipping; Army requirements and shipment	Factors in packaging, storing and shipping; Army requirements.	Spec. No. PP-B-81; PP-B-196; PP-B-214; PP-B-81; PP-B-71; PP-B-566; PP-T-576; current series.	L, D	(3)										3	
(3) Inspection	Types of deterioration and preventive measures; trailer inspection; bruises.	(Meat Hygiene, Edlemann, pp. 348-360, 377-384); (Military Meat & Dairy Hygiene, Bakins, pp. 331-356.)	L, D	(3)										3	

Veterinary Technicians and Meat and Dairy Hygienists

Detailed Program (Cont'd) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
150. (Cont'd)																				
(4) On-the-job study	On-the-job study of the methods of curing, and smoking procedures; storage; packing and shipping; inspection procedures; triler inspection procedures by students.	All previous references.	C,AE	(6)										6						
p. Rendered fats and oils	Methods of manufacture of lard and lard substitutes; vegetable fats; oils; Army requirements and inspection procedure 3.	TM 10-210, par. 83; Spec. No. KE-S-321; (Pork operations, Institute of Meat and Packing, pp. 343-400).	C,D	(2)										2						
q. Canned Meats; Army rations																				
(1) Canning Methods	Canning processes; types of canned products; selection of raw materials; packing.	TM 8-220, par. 399; TM 10-210, par. 84; TM 10-405, par. 33; (Military Meat & Dairy Hygiene, Eakins, pp. 357-370).	C,D	(2)										2						
(2) Army canned meats; Army rations.	The composition and specifications of Army canned meats; meat component of Army rations. (C. K. 10-1n-1.	Spec. No. PP-B-201; 211; PP-E-91; PP-S-101; 147, 311, PP-T-171, 571.	C,D	(4)										4						
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Detailed Program (Cont'd) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
15g. (Cont'd)																				
(3) Inspections	Inspection procedures; factors determining spoiled cans; leakers, swellers, etc.	(Military Meat and Dairy Hygiene, Watkins, pp. 371-397.)	C,D	(2)											2					
(4) on-the-job study	On-the-job study of canning processes; Army ration components; packing; storage; shipping; stock pile inspection.	All previous references	C,AE	(6)											6					
F. Sea Foods																				
(1) Fresh and Frozen	Types of fresh and frozen fish used by Army, including oysters and other marine foods; procurement; processing inspection procedures.	TM 8-220, par. 401; TM 10-210, par. 91; Spec. No. FR-C-401, 656; PP-F-318, 381; PP-O-956. (Military Meat & Dairy Hygiene, Watkins, pp. 493-520).	C,D	(4)											2	2				
(2) Oyster Standards; pH test	Standards for oysters; grades, demonstration in use of hydrogen in slide comparator in pH test.	Oyster Standards, W. D. Field Eggs.	L,D	(1)												1				
(3) Storage	Factors in refrigeration and cold storage of fish; packing and shipping; storage inspections.	(Military Meat & Dairy Hygiene, pp. 493-520).	C,D	(3)												3				
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				



Detailed Program (Cont'd) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
15. (Cont'd)															
(4) Canned fish products	Canning processes; sanitary inspection during canning process; inspection in storage; geolification.	Spec. No. PP-C-651; PP-F-371; PP-O-951; PP-S-31, 311; F'-L-371; (Military Meat and Dairy Hygiene, Eakins, pp. 493-520).	C,D	(2)											
					2										
8. Poultry															
(1) Live and dressed	Types, classes and grades of live and dressed poultry; slaughtering methods; packing; freezing; shipping; Federal specifications.	TM 10-210, par. 89; TM 10-405, par. 30; Spec. No. PP-C-248; PP-O-745; IL-P-631; PP-L-791; (Military Meat & Dairy Hygiene, Eakins, pp. 465-478).	C,D	(4)											
					4										
(2) Inspection	Inspection procedures for live and dressed poultry; dressing defects and deformities; inspection for condition; freezer burns, etc.	(Military Meat & Dairy Hygiene, Eakins, pp. 479-480).	L,D	(3)											
					3										
(3) On-the-job Study	On-the-job study of poultry plant operation; procedure in sanitary plant inspection; inspection procedures in processing and in storage.	All previous references.	C,D	(4)											
					4										

Detailed Program (Cont'd) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK											
					1	2	3	4	5	6	7	8	9	10	11	12
15. (Cont'd)																
t. Eggs																
(1) Fresh shell eggs	Classes; grades, weights; Federal specifications.	TM 10-210, par. 90; TM 8-220, par. 400; TM 10-405, par. 32; Spec. No. C-E-271, current series; (Military Meat & Dairy Hygiene, Bakins, pp. 481-489).	C,D	(2)												
(2) Candling	Procedures in egg candling; demonstration of air cell; comparison of fresh and old eggs; defects and rots.	TM 8-220, par. 400.	L,D	(2)												
(3) On-the-job study	Actual performance.	All previous references.	O,AE	(6)												
4) Preserved, frozen, desiccated & powdered	Types used by Army; processing of each type; storage and packaging; factors involved in inspection of each type. Federal specifications.	(Military Meat & Dairy Hygiene, Bakins, pp. 490-492);	L,D	(2)												
u. Milk																
(1) General	Types of milk and specifications governing procurement.	AR 40-2190, Sec. III; TM 8-220, par. 390-391; TM 10-210, par. 85-86; Spec. No. C-M-321, 341.	I	(4)												

Veterinary Technicians and Meat and Dairy Hygienists

Detailed Program (Cont'd) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
15a (1) (Cont'd)		351, 371, 381; U.S. Public Health Service Milk Ordinance and Code); (The Market Milk In- dustry, Road- house and Hender- son, pp. 102- 127, 490-527).													
(2) Dairy Farms	Factors in considering the sanitary condition of a dairy farm. Tour of dairy farms.	AR 40-2150, par. 13-14; (The Market Milk In- dustry, Road- house & Hender- son, pp. 102- 127, 490-527).	C, D	(4)											
(3) Milk Plant	Milk plant operation and sanitary inspection methods; visit to dairy plant.	AR 40-2150, par. 12; (The Market Milk Industry, Roadhouse and Henderson, pp. 197-330, 490- 527.)	C, D	(4)											
(4) Ice Cream	Processing ice cream, sherbet and ices; sanitary methods; Federal specifications.	TM 8-220, par. 392; Spec. No. TM-1-116, current series; (Military Meat and Dairy Hygiene, Takins, pp. 570-577).	L, D	(2)											



Detailed Program (Cont'd) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
15. (Cont'd)																				
(5) Condensed & dried dairy products																				
(a) Types	Production methods for evaporated milk, sweetened condensed milk, dried whole milk, and ice cream mix; Federal specifications.	Spec. No. O-M-321, 341, 351, 371; (Military Meat & Dairy Hygiene, Tekins, pp. 578-589).	I, D	(3)																
(b) Sanitary measures; inspection procedures	Sanitary measures in processing; inspection procedures, storage requirements.	(Military Meat & Dairy Hygiene, Tekins, pp. 578-589).	I, D	(4)																
(6) Laboratory analysis of milk and milk products	Standard methods of milk analysis, with particular emphasis on the phosphatase test; actual performance of the various tests by the student.	TM 8-230, par. 395; TM 2-227, par. 373-375; (The Market Milk Industry, Rodhouse and Henderson, pp. 543-580); (Military Meat and Dairy Hygiene, Tekins, pp. 539-546, 590-633).	I, D, AE	(8)																

TRAINING PROGRAM FORM 38 433, AUG 10, 1943

Detailed Program (Cont'd) 14b

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
15. (Cont'd)																				
V. Butter	Processing butter; grading and scoring; sanitary measures during production inspection.	TM 8-220, par. 394; TM 10-210, par. 87; Spec. No. C-S-801, current series; (Military Meat & Dairy Hygiene, Eskins, pp. 590-619.)	L,D	(4)														4		
W. Cheese	Manufacturing methods; grading factors; storage; inspection; Federal specifications.	TM 8-220, par. 394; TM 10-210, par. 88; Spec. No. C-C-271, 281, 301, current series; (Military Meat & Dairy Hygiene, Eskins, pp. 620-633).	L,D	(4)														4		
X. Storage of subsistence	Review of storage for all types of subsistence.	All previous references.	C	(3)														3		
• Laboratory samples	Methods of collecting, packing and shipping food samples for laboratory analysis.	AR 40-2140	L,D	(1)														1		
16. Time Reserved for the Commandant				24	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
TOTAL HOURS				456	38	38	38	38	38	38	38	38	38	38	38	38	35	38		
TRAINING PROGRAM	FORM SG 428, AUG 10 1943																			

Program for X-Ray Technicians

Technical

Summary Program for 15d.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK											
					1	2	3	4	5	6	7	8	9	10	11	12
4. Physics	The fundamentals of elementary physics, as related to x-ray.	TM 1-455; TM 8-240; (Radiologic Physics, Weyl, Warren & O'Neill; Manual of Roentgenologic Tech., Sante; Fundamentals of Roentgenology Physics & Technique, McGraw & Wagner; Practical Electricity, Croft; Introduction to Physics, Howe.)	L.C.D., AE	72	18	17	19	18								
5. X-Ray Units	Wiring diagrams, construction of x-ray units used at army installations.	TM 8-240; (Manual of Roentgenologic Technique, Sante; Radiologic Physics, Weyl, Warren & O'Neill; Medical Radiographic Technique, Files; Army Field X-Ray Equip.,	L.C.D., AE	93	12	13	12	12	16	14	2	2	2	2	2	2





Program for X-Ray Technicians

Technical

Summary Program (Cont'd) per 150.

SUBJECT	SCOPE	TEXT REFERENCE	METHODS OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
11. Manipulation & Positioning	Routine and special positioning of patients; actual practice in use of x-ray units.	TM 8-240 (Manual of Roentgenologic Technique, Series)	C, D, AE	239							14	24	22	22	21	22	27	33
12. Field X-Ray Equipment	Description, assembly, operation and service; practical field exercise.	TM 8-275 (Army Field X-ray Manuals, Picker X-ray Corp.)	C, D, AE	50							7	7	6	7	6	6	7	4
13. Administration	Public property, requisitioning and care of supplies, records and reports.	FM 8-10; TM 8-220; TM 8-275 (Medical Supply Catalogue.)	I, C, D	10							8	2						
14. Foreign Body Localization	The various techniques of locating foreign bodies by means of x-ray.	TM 8-275 (Army Field X-ray Equipment, Picker X-ray Corp; Medical Radiographic Technic, Files.)	I, C, D, AE	22									2	2	3	3	3	3
15. Time Reserved for Commandant				32	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Total Hours				608	36	36	36	36	36	36	36	36	36	36	36	36	36	36

Program for X-Ray Technicians

Technical

Detailed Program par. 15 b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<u>TECHNICAL</u> Physics				72																
a. Introduction	Definitions; purpose and scope of the course.	NONE	L	(1)	1															
Matter	Definitions; forms of matter; construction; molecules; monatomic, diatomic molecules; molecular compound relationship.	TM 8-240, Sec. II, Sec. III. (Radio-logic Physics, Weyl, Warren, O'Neill, P. 32)	L, C	(2)	2															
c. Atoms	Definition; relation of atoms to elements and compounds; atomic number and weight.	TM 8-240, Sec. II, Sec. III (Weyl, Warren, O'Neill, pp. 31)	L, C	(2)	2															

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Program for X-ray Technicians

Technical

Detailed Program (Cont'd) See III par. 152.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4. (Cont'd)																				
d. Electrons	Definition; size; charge, characteristics, location within atoms, electronic motions.	TM 8-240, par 5; (Manual of Roentgenological Technology, Sante, pp 3-4; Fundamentals of Roentgenologic Physics and Tech. McCaw & Wagner, pp 1-5; Radiologic Physics, Weyl, Warren, O'Neill, p. 33.) Practical Electricity, Terrell Croft, pp 145-155)	D, C	(2)	2															
e. Protons	Definition; size; charge; characteristics; location within atom.	TM 1-455, par 2; TM 8-240, par 5; (Radiologic Physics, Weyl, Warren, O'Neill, pp. 33-37)	C	(1)	1															
Neutrons	Definition; size, charge, characteristics; location within atom.	TM 1-455, par 2; TM 8-240, par 5; (Radiologic Physics, Weyl, Warren, O'Neill, pp 33-37)	C	(1)	1															
f. Atoms	Electron, proton, neutron, alpha particles; structure of atoms.	DO	C, D	(1)	1															
h. Magnetism																				
(1) General	Definition; nature of magnetism; types of magnets; properties of magnets.	TM 1-455, par 40-53; TM 8-240, par 6; (Radiologic Physics, Weyl, Warren, O'Neill, pp. 28-34, 36, Roentgenological Tech., Sante, p. 12)	C, D	(3)	3															
TRAINING PROGRAM	FORM 38 426, AUG 10 1943																			

Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec. III per N.T.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4h. (Cont'd)																				
(2) Magnetic Poles	Definition; law of magnetic poles, lines and fields of force; flux and induction.	DO	L, C, D	(3)	3															
) Nature of Magnets	The nature, behavior and use of magnets.	TM 1-455, par. 40-53; TM 8-240, par. 6. (Radiologic Physics, Weyl, Warren, O'Neill, pp. 22-24, 38; Roentgenological Technique, Sante, p. 12. Practical Electricity, Croft, pp. 25-52)	D	(2)	2															
(4) Electro-Magnetism	Relation of magnetism and electricity; polarity of electromagnets; importance of electromagnetism and its application.	TM 1-455, par. 47-51; TM 8-240, par. 6. (Radiologic Physics, Weyl, Warren, O'Neill, pp. 27, 28, 219-222. Practical Electricity, Croft, pp. 142-153.)	L, C	(3)	3															
(5) Electro-Magnets	Demonstrating of electromagnets.	DO	D	(2)	2															
1. Electricity																				

TRAINING PROGRAM FORM 56 426, AUG 10 1943

Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec. III par. 154.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
41. (Cont'd)																				
(1) Static	Nature; behavior; electrostatic induction; action of like and unlike charges.	TM 1-455, par. 3. (Fundamentals of Roentgenologic Physics & Technique, McGraw & Werner, pp. 14-17; Practical Electricity, Croft, pp. 3-14, 68-69.)	I, C, D,	(3)		3														
(2) Current	Types; nature and behavior of alternating and direct current.	TM 1-455, par. 10-11; TM 8-240, par. 9; (McGraw & Werner, pp. 14-17; Croft, pp. 3-14, 68-69.)	I, C, D	(4)		4														
(3) Electron Flow	Methods of causing electrons to flow, static action, and chemical action, piezoelectricity.	(McGraw & Werner, pp. 15-16; Croft, pp. 68-69. Introduction to Physics, Howe, p. 253, 349, 355)	I, C	(4)		4														
(4) Thermo-Couple	Basic consideration and use of the thermocouple and thermopile.	(Introduction to Physics, Howe, p. 214.)	C, D	(1)		1														
(5) Pyro & Photo-Electricity	Basic consideration of pyro and photo-electricity; magnetic fields of force.	(McGraw & Werner, pp. 15-16; Croft, pp. 68-69; Howe, pp. 414-420)	C, D	(3)		3														
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				



Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec. III per. 1944.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
41, (Cont'd)																				
(6) Conductors & Insulators	Definition: basic considerations; uses of conductors and insulators.	(Howe, pp. 265-281.)	C,D	(2)			2													
(7) Summary on Fundamentals	Methods of causing electricity to flow, static electricity, chemical, thermocouple, piezo, pyro, photo, electricity produced by magnetic field of force, electrical conductors and insulators.	All previous references on Electricity	C,D,E	(2)			2													
J. Electrical Terms																				
(1) Amperage	Definitions and application of ampere, milliampere second, filament ampere, coulomb.	TM 1-455, par. 9-16, 99-108. (Howe, pp. 320) (McCaw & Wagner, pp. 18-28.)	I,C	(3)			3													
(2) Voltage	Definitions and application of volt, kilovolt, kilovolt peak, kilovolt effective.	TM 1-455, par. 9-16, 99-108 (Howe, pp. 293, 322, McCaw & Wagner, pp. 18-28.)	I,C	(2)			2													
(3) Watt, Ohm, & Line Drop	Definitions and application of watt, kilowatt, ohm, megohm, line, line drop.	TM 1-455, par. 8-16, 99-108; (Howe, 115, 336, 324, 363, 342.)	I,C	(3)			3													
(4) Miscellaneous	Definitions and application of load, circuit, ground, cell, battery, switches, fuse, circuit breaker, surge, corona, resistor, terminal, Ohm's law, power law.	TM 1-455, par. 8-16, (McCaw & Wagner, pp. 21, 22, 27, 28; Croft, pp. 81-113.)	I,C	(4)			4													
TRAINING PROGRAM FORM 36 428, AUG 10 1943																				

Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec. III par. 15k.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4. (Cont'd)																				
k. Electrical Measuring Devices																				
(1) Galvanometer	Characteristics, construction, use of the galvanometer.	(Howe, pp. 318.)	I, C	(1)					1											
(2) Ammeters	Construction and use of ammeter, milliammeter, microammeter.	TM 1-455, par. 101 (Howe, p. 330)	C, D	(3)					3											
(3) Voltmeters	Construction and use of voltmeters, kilovoltmeters.	TM 1-455, par. 102 (Howe, p. 332)	C, D	(3)					3											
1. Current																				
(1) Direct	Production and qualities of direct constant, direct continuous and direct pulsating currents.	TM 8-240, par. 9, (Howe, Ch. 25.)	I, C	(3)					3											
(2) Alternating	Production and qualities of alternating current; frequency and cycle.	TM 8-240, par. 9, (Howe, pp. 370, 379, 380, 386.)	I, C	(4)					4											
Circuits	Definitions and types of circuits; series, parallel, series-parallel; calculation of resistance of above circuits.	TM 1-455, par. 26-39; TM 8-240, par. 12	C, D	(4)					4											
5. X-Ray Units				93																
a. Circuits																				
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) *Sec. III p. 154.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5a. (Cont'd)																				
(1) High Voltage, etc.	An understanding of the various circuits of x-ray machines; high voltage, autotransformer, high tension transformer circuit, low voltage circuit, filament circuit, live circuit.	TM 8-240, par. 16, 18-23. (Sante, pp. 17-20; Weyl, Warren & O'Neill, pp. 179, 192, 194.)	L, C, D	(4)	4															
(2) Supplementary, etc.	Circuits control - supplementary, three phase, condenser discharge, motor circuit, valve tube filament remote control, accessory devices, timers, polarity indicators, stabilizers.	TM 8-240, par. 16, 18-23. (Sante, pp. 17-20; Weyl, Warren & O'Neill, pp. 179, 192, 194.)	L, C, D	(4)	4															
b. Wiring Diagrams	An understanding of wiring diagrams and tracing circuits as outlined in 5a (1) & (2).	TM 8-240, par. 16, 18-23; (Sante, pp. 17-20; Weyl, Warren and O'Neill, pp. 179, 192, 194)	C, D, A	(4)	4															
(c. Rectification	Self rectified x-ray apparatus; valve, tube rectification, single, valve tube, copper oxide and tungsten tube, four valve tube, mechanically rectified apparatus.	TM 8-240, par. 23-24, Weyl, Warren, & O'Neill, pp. 180-191.)	L, C	(3)	3															
d. Production of X-rays	Conditions necessary for the production of x-rays; general principles involved in production of x-rays; types of x-rays.	TM 8-240, par. 2-5, (Sante, pp. 23-32; Medical Radiographic Technic, Files, p. 15; Weyl, Warren, O'Neill, pp. 228-240.)	L, C	(4)	4															
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				



Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) *Sec. II, par. 174.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5. (Cont'd)																				
e. X-ray tubes	The various types of x-ray tubes; differences; advantages and disadvantages; gas tubes, hot cathode, double focus, variable focal spot, live focus, rotating anode, ray proof, shockproof tubes.	(Sante, pp. 23-32; Weyl, Warren, O'Neill, pp. 150-156.)	C, D	(4)		4														
f. Theory of Radiant Energy & Nature of X-Ray Beam																				
(1) Corpuscular Theory of Light	Rectilinear propagation of light; reflection and refraction; color and visible spectrum.	(Weyl, Warren & O'Neill, pp. 205-209; Sante, p. 37)	L, C	(2)		2														
(2) Wave Theory of Light	Nature of waves; the theory; interference, diffraction and polarization; electromagnetic waves and spectrum.	(Weyl, Warren & O'Neill, pp. 209-222; Sante, p. 37.)	b, C	(3)			3													
(3) Quantum Theory of Radiation	Quantization of energy; photo electric effect; live spectrum; dual nature of radiation; angstrom unit; x-ray unit.	(Weyl, Warren & O'Neill, pp. 222-227, 232; Sante, pp. 37.)	L, C	(2)			2													
g. Characteristics & Physical properties of x-ray beam																				
(1) Penetration	Passage of x-rays through luminiferous ether; ability to penetrate solid objects, reason for this ability, use, and importance.	(Weyl, Warren & O'Neill, pp. 249-40.) (Sante, pp. 33-40.)	L, C, D	(2)			2													

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec. III per 15'4

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5g. (Cont'd)																				
(2) Effect on Photographic Emulsion and Crystals	An understanding of the effect of x-rays on photographic emulsion and chemical crystals; the importance of these effects and use that is made of them.	(Voyl, Warren & O'Neill, pp. 252-249; Sante, pp. 33-40.)	L, C, D	(3)			3													
(3) Physiologic Effects and Safety Factors.	Understanding of the physiological effect of x-ray and the precautionary measures necessary to prevent harmful effects.	TM 8-240, par. 39. (Voyl, Warren, & O'Neill, pp. 252; Sante, pp. 33-40.)	L, C, D	(3)			2	1												
h. Control Panels																				
(1) Army Field Unit	The arrangement and use of the Army Field Unit control panel,	(Army Field X-Ray Equipment, Picker X-Ray Corp.)	L, C	(1)				1												
(2) Kelly-Koett	The arrangement and use of the Kelly-Koett control panel	(Kelly-Koett Operation Manual)	L, C	(1)				1												
3) G-E	The arrangement and use of the G-E control panel.	(G-E Operation Manual.)	L, C	(1)				1												
(4) Westinghouse	The arrangement and use of the Westinghouse control panel.	(Westinghouse Operation Manual)	L, C	(1)				1												
(5) Practical Exercises	Practice in the use of the various control panels.	All previous control panel references.	AE	(10)				7	3											
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for X-ray Technicians

Technical

Detailed Program (Cont'd) Sac. III part

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
51. X-Ray Accessories																				
(1) Cones, Cylinders & Diaphragms	Construction, characteristics and use of cones, cylinders and diaphragms.	TM 8-240, par. 40-42; (Fundamentals of Radiography, Eastman Co., pp. 30-34; Sante, pp. 11, 36-39, 49, 54, 59.)	C,D	(2)		2														
(2) Grids and Screens	Uses and types of grids; construction, characteristics, and factors influencing speed of screens; uses of screens; care and repair of screens.	DO	C,D	(2)		2														
(3) Cassettes	Characteristics, use and calibration of cassettes.	DO	C,D	(1)		1														
(4) Miscellaneous	Use of immobilization and timing devices.	DO	C,D	(1)		1														
(5) Practical Exercise	Practice in the use of cones, cylinders, diaphragms, grids, screens, cassettes and calibration, immobilization, and timing devices.	DO	AE	(9)		9														
J. Basic Techniques																				
(1) Fundamentals	Selection of KV, MA, time and target-film distance; techniques of roentgenographic quality; stereoscope; tissue densities.	TM 8-240, par. 48-50; TM 8-275; par. 41-52; (Fundamentals of Radiology, Eastman Co.; Sante, pp. 53-56; Medical Radiographic Technic, Miles, pp. 203-209)	I,C,D	(2)		2														
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				



Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec. II per N.T.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
51. (Cont'd)																				
(2) Common Errors in Technique	The common errors in technique and methods for preventing their occurrence.	TM 8-240, par. 48-50; TM 8-275, par. 41-52; (Fundamentals of Radiology, Eastman Co., Sante, pp. 53-56; Medical Radiographic Technic, Files, pp. 203-209)	L, C	(1)						1										
(3) Capacity and Rating of Tubes	Factors involved and method used for determining capacity and rating of tubes.	TM 8-240, par. 22. (Fundamentals of Radiology, Eastman Co., pp. 12-16; Sante, pp. 23-32; Files, p. 111.)	L, C	(1)						1										
(4) Practice Exercise	Practice in the basic technique involved in using the x-ray apparatus.	All previous references on Basic Technique	AE	(8)						3	5									
Summary	Practical exercise to summarize material on x-ray circuits; wiring diagram circuits; construction features of various types of x-ray units; grids, cassettes, diaphragms, cones, cylinders, filters, wiring of autotransformers, transformers, choke coils and meters into circuits; construction of technique computer.	All previous references	AE	(14)								2	2	2	2	2	2	2		
TRAINING PROGRAM FORM SG 425, AUG 10 1943																				

Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec. III, par. 15K.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
6. Anatomy																				
a. Introduction	Purpose and scope of the course, methods of presentation, references and instructional aids; brief review of systems of the body; classification of terminology.	TM 8-220, par. 7-9; (Gray's Anatomy)	I, D	36 (2)	2															
b. Upper & Lower Extremities																				
(1) Osteology	Detailed osteology of the upper and lower extremities.	TM 8-220, pp. 10-12; TM 8-240, pp. 75-89, 101-127; (Gray's Anatomy.)	L, C, D	(4)	4															
(2) Joints	Consideration of structure and function of the major joints, including wrist, elbow, shoulder, ankle, knee, and hip.	TM 8-220, par. 10-12, 13; TM 8-240, pp. 75-89, 101-127; (Gray's Anatomy.)	L, C, D	(2)	2															
(3) Soft Tissues	General discussion of soft tissue construction of extremities.	DO	L, C, D	(1)	1															
(4) Correlation of Actual and Film Anatomy	of Considerations and comparisons of actual and film anatomy.	DO	L, C, D	(3)	3															
c. Pelvis, Vertebral, Column, Ribs & Sternum																				
(1) Osteology	Detailed osteology of the pelvis, vertebral column; ribs and sternum; bony landmarks of the torso.	TM 8-220, par. 19; TM 8-240, pp. 129-149; (Gray's Anatomy.)	L, C, D	(3)	3															
TRAINING PROGRAM FORM 38-426, AUG 16 1943																				

Program for X-ray Technicians

Technical

Detailed Program (Continued) Sec. II per C. 154.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
6c. (Cont'd)																				
(2) Correlation of Actual & Film Anatomy	Consideration and comparisons of actual and film anatomy.	DO	L, C, D	(2)			2													
Osteology of the Skull	Name, shape and location of the bones of the cranium and face, location and construction of accessory nasal sinuses; the petrous temporal and the mastoids; the orbits, nose, teeth; correlation of actual and film anatomy.	TM 8-240, pp. 169-193 (Gray's Anatomy) TM 8-220, pp 9, 10, 18, 27-31	L, C, D	(4)				4												
e. Thorax	The thoracic cavity and its boundaries; the pleural cavities and the mediastinum; structure and topographical anatomy of the lungs; the heart and great vessels; the esophagus and trachea; the diaphragm; correlation of actual and film anatomy.	TM 8-220, pp. 10 15-21; TM 8-240, pp. 151-167; (Gray's Anatomy)	L, C, D	(2)				2												
Abdomen and Pelvis																				
(1) Anatomy and Physiology of the G-I Tract	The peritoneal cavity and its boundaries; structure and function of the G-I tract and accessory organs of digestion.	TM 8-220, pp. 41-50; TM 8-240, pp. 198-203. (Gray's Anatomy)	L, C, D	(2)					2											

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec. III *per. 154.*

SUBJECT	SCORE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
6c. (Cont'd)																				
(2) Anatomy & Physiology of the G-U System	Structure and function of the organs of the G-U system.	TM 8-220, par. 52; L, C, D TM 8-240, pp. 196-197; 204-205; (Gray's Anatomy)	L, C, D	(2)						2										
) Surface Anatomy	Surface anatomy of the torso.	TM 8-220, par. 41-52; (Gray's Anatomy)	L, C, D	(4)						4										
(4) Correlation of Actual & Film Anatomy	Considerations and comparisons of actual and film anatomy.	All previous references on Abdomen & Pelvis	L, C, D	(2)						2										
6. Brain & Spinal Cord	Brief description of component parts of the brain and spinal cord; the subarachnoid space and the ventricular system; correlation of actual and film anatomy.	TM 8-220, par. 53. (Gray's Anatomy)	L, C, D	(2)						2										
h. Endocrine Glands	Location and general functions of the endocrine glands.	TM 8-220, par. 54. (Gray's Anatomy)	L, C, D	(1)							1									
7. Radiographic Materials				22																
a. X-Ray Films																				
(1) Characteristics	The physical properties of x-ray film; characteristics; sensitiveness; common sizes.	TM 8-240, par. 44. (Fundamentals of Radiography, Eastman Co.; pp. 43-44.	C, D	(2)						2										
(2) Storage	Considerations in storage of unexposed and exposed film.	TM 8-240, par. 45 (Eastman Co. pp. 44)	C, D	(1)						1										
TRAINING PROGRAM FORM SG 426, AUG 10 1943																				

TRAINING PROGRAM FORM 56 428, AUG 10 1943



Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec. III - para. 11A.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
8. Dark Room				22											
a. Construction Plan	The arrangement of the dark room; testing the dark room.	TM 8-240, par. 43 (Eastman Co.; pp 48-54; Sante, pp. 59-64; Files, pp 134-141)	L, C, D	(1)		1									
b. Equipment	The equipment necessary in the processing room.	TM 8-240, Sec. IX; (Eastman Co.; pp 48-54; Sante, pp 59-64; Files, pp 135-146.)	C, D	(3)		3									
c. Processing Film	Processing, developing, fixing, washing and drying of film; dark room errors.	TM 8-240, par. 46 (Eastman Co.; pp 55-66; Files, pp 143-147.)	C, D	(4)		4									
d. Practical	Actual practice in processing exposed x-ray films in the dark room.	DO	AE	(14)						1	1	1	2	1	2
9. Protective Measures	Safe and unsafe electrical circuits; electrical shock; artificial respiration; biologic effects of radiation; chronic over-exposure; radio-dermatitis; radiation safety measures; tests for excessive radiation; periodic blood counts.	TM 8-240, par. 37-40; (Fundamentals of Radiography, Eastman Co.; pp 16-18; Sante, pp 25, 30, 40, 203-204)	C, D	2				2							
10. Fluoroscopy				8											
a. Equipment and Technique	General procedure of fluoroscopic examination; fluoroscopic screen, shutters, controls, protection of patient and operator; role of x-ray film; use of lead apron of patient.	TM 8-275, p. 65, (Sante, pp. 34-35; Files, pp. 162-164)	L, C, D	(4)									2	2	
TRAINING PROGRAM															



Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec. III For N.T.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
10. (Cont'd)																				
b. Practical Exercise	Practical experience in fluoroscopy in x-ray department of school and hospital.	DO	AE	(4)														2	2	
11 Manipulation & Positioning	Routine and special positioning of patients; actual practice in use of x-ray units will include at least two exposures of each position.			239																
a. Hand																				
(1) PA	DO	TM 8-240, pp 74 (Sante, p. 64)	C,D,AE	(4)								4								
(2) Oblique	DO	TM 8-240, p. 76 (Sante, p. 67)	C,D,AE	(3)								3								
b. Wrist (PA & Lateral)	DO	TM 8-240, pp 78-81	C,D,AE	(3)								3								
c. Forearm																				
1) AP	DO	TM 8-240, p. 82	C,D,AE	(3)									3							
(2) LATERAL	DO	TM 8-240, p. 84	C,D,AE	(3)									3							
d. Elbow																				
(1) Lateral	DO	TM 8-240, p. 85	C,D,AE	(4)									4							
(2) AP	DO	TM 8-240, p. 86	C,D,AE	(4)									4							
(3) Flexed	DO	(Sante, p. 73)	C,D,AE	(4)									4							
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec III par. 44.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
11. (Cont'd)															
e. Humerus															
(1) AP & Lateral DO		TN 8-240, pp. 90-92	C,D,AE	(4)								2	2		
2) AP & Lateral DO (arm in sling)		TN 8-240, pp. 90-94	C,D,AE	(4)								4	4		
f. Shoulder	do	TN 8-240, pp. 94-97	C,D,AE	(4)								4	4		
g. Foot															
(1) Dorsal-Plantar DO		TN 8-240, pp. 100-101	C,D,AE	(4)								4	4		
(2) Oblique	DO	TN 8-240, pp. 102-105	C,D,AE	(4)								4	4		
(3) Os Calcis	DO	TN 8-240, pp. 106-107	C,D,AE	(2)										2	
h. Ankle															
(1) AP	DO	TN 8-240, pp 108	C,D,AE	(4)								4	4		
(2) Lateral	DO	TN 8-240, 110	C,D,AE	(4)								4	4		
i. Tibia & Fibula															
(1) AP	DO	TN 8-240, pp. 112C,D,AE	C,D,AE	(4)								4	4		
(2) Lateral	DO	TN 8-240, pp 114	C,D,AE	(4)								4	4		

Program for X-ray Technicians

Technical

Detailed Program (Cont'd) Sec. III *Prn. N.T.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
11. (Cont'd)																				
J. Knee																				
(1) PA	DO	TM 8-240, p. 116	C, D, AE	(4)																
(2) Lateral	DO	TM 8-240, p. 118	C, D, AE	(4)																
K. Femur	DO	TM 8-240, pp. 120-123	C, D, AE	(4)																
L. Hip																				
(1) AP & Lateral	DO	TM 8-240, pp. 124-127	C, D, AE	(4)																
(2) AP & Lateral (Patient on stretcher)	DO	TM 8-240, pp. 124-125	C, D, AE	(4)																
M. Pelvis	DO	TM 8-240, p. 128 (Sente, pp. 137-138)	C, D, AE	(4)																
Vertebrae																				
(1) Cervical																				
(a) AP	DO	TM 8-240, pp. 142, 148	C, D, AE	(4)																
(b) Lateral	DO	TM 8-240, pp. 144, 146	C, D, AE	(4)																
(2) Thoracic																				
(a) AP	DO	TM 8-240, p. 136	C, D, AE	(4)																
TRAINING PROGRAM FORM 36 426, AUG 10 1943																				



Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec. II *per. 15th*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
11n. (2) (Cont'd)															
(b) Lateral	DO	TM 8-240, pp. 138-140	C, D, AE	(4)											
(3) Lumbar	DO	TM 8-240, p 130	C, D, AE	(4)											
) AP	DO	TM 8-240, pp. 132-135	C, D, A, E	(4)											
(b) Lateral	DO	TM 8-240, p. 128 (Sante, 136-138)	C, D, AE	(4)											
(4) Sacrum	DO	TM 8-240, p 128 (Sante, 136-138)	C, D, AE	(4)											
(5) Coccyx	DO	TM 8-240, p 128 (Sante, 136-138)	C, D, AE	(4)											
o. Skull															
(1) AP	DO	TM 8-240, p 168	C, D, AE	(4)											
(2) Lateral	DO	TM 8-240, p 170	C, D, AE	(4)											
Sinuses															
(1) Frontal	DO	TM 8-240, pp. 180-181	C, D, AE	(4)											
(2) Maxillary	DO	TM 8-240, pp. 178-179	C, D, AE	(4)											
(3) Sphenoid	DO	TM 8-240, pp. 182-187	C, D, AE	(4)											
g. Mastoid	DO	TM 8-240, pp. 172-177	C, D, AE	(4)											

Program for X-ray Technicians

Technical

Detailed Program (Cont'd) Sec. III per 154.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
11. (Cont'd)															
r. Mandible	DO	TN 8-240, pp. 172-177	C, D, AE	(4)											
s. Chest															
1) Pa	DO	TN 8-240, pp. 150, 193	C, D, AE	(8)											
(2) Lateral	DO	TN 8-240, p 152	C, D, AE	(4)											
t. Sternum	DO	TN 8-240, pp. 164-167	C, D, AE	(4)											
u. G-I	DO	TN 8-240, pp 198-203, 208, 212-216	C, D, AE	(4)											
v. Esophagus	DO	TN 8-240, pp. 212-217	C, D, AE	(4)											
w. Stomach and Small Intestine	DO	TN 8-240, pp. 200-201	C, D, AE	(4)											
. Large Intestine	DO	TN 8-240, pp. 198-199	C, D, AE	(4)											
7. Gall-Bladder	DO	TN 8-240, pp. 206-207	C, D, AE	(4)											
8. G-U															
(1) KUB	DO	TN 8-240, pp. 196-197, 204	C, D, AE	(4)											
(2) Pyelography	DO	TN 8-240, pp. 196-197	C, D, AE	(4)											

Program for X-ray Technicians

Technical

Detailed Program (Cont'd) *Sec. III per 154*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
11. (Cont'd)															
aa. Film Criticism	Evaluation of the result and films; errors, cause and prevention; interpretation.	All previous references	C, AE	(45)				4			4	4	4	4	5
12 Field X-Ray Equipment				50											
a. U.S. Army Field Unit - assembly and disassembly	Unpacking and setting-up of Army Field Unit; disassembly and repacking of unit.	TM 8-275, pp. 19-44 (Army Field X-Ray Instruction Manuals, Picker X-Ray Corp); TS 8-86, 87, 88, 89, 90 DO	C, D AE	(3) (8)				3			4	4			
b. Practiced Exercise	Practice in setting up Army Field Unit under conditions of light and blackout.		AE								4	4			
c. Positioning & Radiography with Field Unit	Trainees work with the field unit; including field motor generator, in the field or under simulated field conditions; taking and developing pictures.														
(1) Hand															
(a) PA	DO	TM 8-240, pp 74	C, D, AE	(3)								3			
(b) Oblique	DO	TM 8-240, p. 76	C, D, AE	(3)									3		
(2) Forearm(AE)	DO	TM 8-240, p. 82	C, D, AE	(3)									3		
(3) Elbow (lateral) DO		TM 8-240, p. 88	C, D, AE	(3)										3	
(4) Humerus(AE)	DO	TM 8-240, p. 90	C, D, AE	(3)										3	

TRAINING PROGRAM FORM 56 428, AUG 10 1943



Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) Sec. III par. 157

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
12c. (Cont'd)															
(5) Shoulder (AP)	DO	TM 8-240, p 94	C, D, AE	(3)											3
(6) Foot (Dorsal-plantar)	DO	TM 8-240, p 100	C, D, AE	(3)											3
7) Tibia and Fibula (AP)	DO	TM 8-240, p 112	C, D, AE	(3)											3
(8) Knee (lateral)	DO	TM 8-240, p 116	C, D, AE	(3)											3
(9) Femur (AP)	DO	TM 8-240, p 120	C, D, AE	(3)											3
(10) Hip (lateral)	DO	TM 8-240, pp. 124-127	C, D, AE	(3)											3
(11) Chest (PA)	DO	TM 8-240, pp. 150, 194	C, D, A, E	(3)											3
(12) Film Criticism	Evaluation of resultant films; errors, cause and prevention; interpretation.	All previous references	C, A, E	(3)										1	1
13. Administration				10											
a. Public Property	Expendable and non-expendable; accountability and responsibility; requisitioning of supplies; the Medical Supply Catalogue; periodic estimates; over, short, and damaged reports; property in the field; monthly inventories.	TM 8-220, par. 308-324; TM 8-279, pp. 2-19, (Medical Supply Catalogue.)	L, C, D	(4)											4

Program for X-ray Technicians

Technical

Detailed Program (Cont'd) See III p. 154.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
13. (Cont'd)																				
b. X-ray Exam. Requests	Use and proper method of filling out x-ray examination request forms; patient film identification in the field; design of x-ray clinics.	TM 8-275, pp. 65-69	L, C, D	(4)							4									
Organization of Medical Department.	The types of installations of the medical department; role of x-ray department and x-ray technicians in the various installations.	TM 8-10, Ch. I, II	L	(2)							2									
14. Foreign Body Localization				22																
a. U.S. Army Method	Working parts; preliminary testing; localization procedure; geometric analysis of method; accuracy; presentation.	TM 8-275, par. 27-34, 54 (Army Field X-ray Equipment, Picker X-ray Corp)	C, D	(2)									2							
b. Fluoroscopy	The fluoroscope; fluoroscopic shutters; depth and marker scale; double exposure.	TM 8-275, par. 27-29. (Picker Manual, pp. 47-48; Files, pp. 162-164)	L, C, D	(2)										2						
c. Introcular	Localization of introcular foreign bodies, headrest, divider charts; dummy eyeball; reporting charts.	TM 8-275, par. 35-40	L, C, D	(4)										2		2				
d. Practical Exercise	Actual experience in foreign body localization.	All previous references.	D, AE	(8)												2	2	2	2	2
TRAINING PROGRAM	FORM SG 428, AUG 10 1943																			

TRAINING PROGRAM FORM SG 426, AUG 10 1943

Program for X-Ray Technicians

Technical

Detailed Program (Cont'd) p.c. 15b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
14. (Cont'd)																				
e. Film Conference	Review; evaluation and interpretation of films.	DO	C, AE	(6)																
15. Time Reserved for the Commandant				32	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Total Hours				608	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Program for Medical Equipment Maintenance Technicians

Technical

Summary Program Part 16d.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<u>TECHNICAL</u> Elementary Electricity	The basic fundamentals of electricity phenomena.	TM 1-455; TM 8-240. (Fundamentals of Roentgenologic Physics and Technique, McGraw and Wagner; Practical Electricity, Groft; MSSS Textbook.)	L, C, D AE	23	23															
Electro-medical Equipment	The fundamental principles of construction, operation, repair and service of electro-medical equipment.	TM 8-614; 8-621; 8-616; 8-627; (MSSS Textbook; Principles and Practice of Electro-cardiography, Pardee; Inductopylexle, General Electric Co.; Physical Therapy, Kovacs; Electro-surgery, Kelly and Ward; Physical Therapy, Krusen.)	L, C, D AE	56	13	36	7													

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Summary Program (Cont'd) pcc. 16d.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
					16	17	18	19	20	21	22	23	24	25	26	27	28	29
6. Miscellaneous Medical Department Equipment	Construction, repairs and service of accessory equipment pertinent to Army installations and hospital units.	(MSSS Textbook; Manufacturers' Literature.)	AE	20			20											
7. Autoclaves and Sterilizers	Basic principles of construction, function, repairs and service of autoclaves, sterilizers, accessories, heating medium circuits, and control devices.	TM 8-615; 8-622; 8-626; 8-628; 8-631; (MSSS Textbook; Manufacturers' Literature.)	L,C, D, AE	78			9 36 33											
8. Gas Anesthesia Equipment, Oxygen Therapy Equipment, Resuscitators, and Metabolizers.	Fundamental principles of construction, function, repairs, and service of accessories, gas equipment, resuscitators, and metabolizers.	TM 8-617; 8-619; (MSSS Textbook; Pharmacology of Anesthesia Drugs, Adams; Art of Anesthesia, Flagg; Manufacturers' Literature.)	L, C, D, AE	56			3			76 17								
9. X-ray Equipment	Medical application, elementary physics, construction, wiring, circuits, operation, installation, repairs and service of the various types and models of x-ray equipment used by the Army.	TM 8-632; 8-633; 8-630; 8-635; TM 1-456; TM 8-240; TM 8-275, (Bureau of Standards Handbook No. 15, 1940. Physics of Roentgenology, Munche-yan; Fundamentals of Radiography. Eastman Kodak Co.; Radiography Physics, Weyl, Warren, O'Neill,	L, C, D, AE	235						19	36	36	36	36	36	36		

Program for Medical Equipment Maintenance Technicians

Technical

Summary Program (cont'd) per 16d.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9. (Cont'd)		Electrical Engineering in Radiology, Sarsfield, Manufacturers' Literature; (MSSS Textbook).																		
10 Dental Equipment	Construction, repairs, and service of dental equipment and accessory equipment pertinent to Army installations.	TM 8-638; (MSSS Textbook; Manufacturers' Literature.)	AE	36														36		
11. Shop Work	Trainees work under the detailed supervision of the instructors in the practical phase of "on-the-job" training in the service and repair of expensive and essential Medical Department equipment.	All previous references.	AE	72														36	36	
12. Time Reserved for Commandant				32	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Total Hours				608	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				



Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program par. 16 b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<u>TECHNICAL</u> Elementary Electricity				25																
a. Basic Theories	The atomic and molecular theories and their relation to electricity.	TM 1-455, par 2, TM 8-240, Sec. II, Sec. III	C	(1) 1																
b. Magnetism	The nature and behavior of magnets, relation of magnetism and electricity.	TM 1-455, par 40-52; TM 8-240, pp 1, 7-9, par 40-42	L, D,	(4) 4																
c. Electrical Terms	Definitions and an understanding of terms; watt, kilowatt, ohm, line drop, load, circuit, ground cell, battery, switches, fuse, circuit	TM 1-455, pars. 8-16, 99, 108. (McCaw & Wagner, Fundamentals of	C, D	(4) 4																

TRAINING PROGRAM FORM SG 428, AUG 10 1943

Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program (Cont'd) *Sec III par 16A.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4c. (Cont'd)	breaker, surge, resistor, terminal, watt meter, Ohm's law, power, law.	Boentgenologic Physics and Technique, pp. 21, 22, 27, 28)																		
d. Electrical Circuits	The types of electrical circuits and their uses; series, parallel, series-parallel; calculation of resistance of these circuits.	(Practical Electricity, Graft, pp. 131-141)	C,D,AE	(4)	4															
e. Measuring Devices	Electrical measuring devices; their construction and use. (Galvanometer, ammeter, milliammeter, volt meter, kilovolt meter.)	TM 1-455, pars. 9-16. (Practical Electricity, Graft, pp. 88-113)	C,D,AE	(4)	4															
f. Current																				
(1) Direct	Characteristics and use of direct constant, direct continuous, direct pulsating currents.	(Practical Electricity, Graft, pp. 66-80, 345-419)	C,D	(3)	3															
(2) Alternating	Characteristics and use of alternating current; frequency cycles.	DO	C,D	(3)	3															
5. Electro-Medical Equipment																				
a. Electro-Cardiograph																				
(1) Introduction	History of electro-cardiography.	(MSSS Textbook, Ch. III, Sec I, A	L	(1)	1															
(2) Anatomy of the Circulatory System	Structure and function of the circulatory system.	(Principles and Practice of Electro-cardiography, Pardoe.)	C,D	(4)	4															
TRAINING PROGRAM FORM 56 420, AUG 10, 1943																				

Detailed Program (Cont'd) Part 16 b.

Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5a. (Cont'd)																				
(3) Heart Beats & Heart Sounds	Understanding of heart beats and heart sounds and their interpretation.	DO	G,D	(2)	2															
(4) Construction of machine	String; amplifier; installation of batteries and galvanometer lamp.	TM 8-614; (MSSS Textbook, Ch.III; Principles and Practice of Electro-Cardiography, Pardee.)	C,D,AE	(4)	4															
(5)Operation	The operation of the machine; loading and unloading the cameras.	TM 8-614; (MSSS Textbook, Ch.III.)	C,D,AE	(4)	2	2														
(6) Timer	Checking and adjusting timer; interference; trouble systems.	TM 8-614; (MSSS Textbook, Ch.III; Principles and Practice of Electro-Cardiography, Pardee.)	C,D,AE	(4)	4															
b																				
Fever Therapy Cabinets	Operation; adjustment, repairs; service.	(MSS Textbook;) (Inductothermia, General Electric Co.	C,D,	(4)	4															
c.																				
Low Voltage Currents	Characteristics and use of galvanic, faradio and sinusoidal currents.	(MSSS Textbook, Physical Therapy, Korose.)	C,D,AE	(3)	3															
d.																				
Therapeutic Lamps																				

TRAINING PROGRAM FORM SG 428, AUG 10 1943



## Technical

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Technical

Detailed Program (Cont'd) Sec. III par. 16A.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5g. (Cont'd) (2) Practical Exercise	Practice in service and repair of short wave diathermy units.	DO	AE	(7)			7													
6. Miscellaneous Med. Department Equipment				20																
a. Flush Valves (Sloan)	Construction; service; repairs.	(MSSS Textbook)	AE	(2)			2													
b. Microtomes	DO	DO	AE	(2)			2													
c. Microscopes	DO	DO	AE	(2)			2													
d. Centrifuges	DO	DO	AE	(2)			2													
e. Sphygmomanometers	DO	DO	AE	(2)			2													
f. Operating Tables	DO	DO	AE	(2)			2													
g. Operating Room Lights	DO	DO	AE	(2)			2													
h. Floor Polishers	DO	DO	AE	(2)			2													
i. Typewriter	DO	DO	AE	(2)			2													
j. Pressure Suction Units	DO	DO	AE	(2)			2													

TRAINING PROGRAM FORM SG 428, AUG 10 1943

**Program for Medical Equipment Maintenance Technicians**

**Technical**

Detailed Program (Cont'd) *pg. 16b.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7. Autoclaves and Sterilizers				78																
a. Autoclave (American)	Accessories, heating mediums, technique, and service and repairs.	TM 8-622; 8-626; 8-628; 8-631. (MSSS Textbook; Manufacturer's Literature.)	C,D,AE	(4)			4													
b. Autoclave (Hospital Supply)			C,D,AE	(4)			4													
c. Autoclave (Scanlan-Morris)			C,D,AE	(4)				1	3											
d. Autoclave (Wilmot-Castle)			C,D,AE	(4)				4												
e. Water Sterilizer (General)			C,D,AE	(4)				4												
f. Water Sterilizer (American)			C,D,AE	(4)				4												
g. Water Sterilizer (Hospital Supply)			C,D,AE	(3)				3												
h. Water Sterilizer (Scanlan-Morris)			C,D,AE	(3)				3												
i. Water Sterilizer (Wilmot-Castle)			C,D,AE	(4)				4												
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				



## Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program (Cont'd) per 16b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7. (Cont'd)																				
j. Utensil and Instrument Sterilizer (American)	Construction; design; function; heating mediums; service and repairs.	TM 8-622; 8-626; 8-628; 8-631. (MSSS Textbook; Manufacturer's Literature.)	C,D,AE	(4)				4												
k. Utensil and Instrument Sterilizer (Hosp. Supply)			C,D,AE	(4)				4												
l. Utensil and Instrument Sterilizer (Scanlan-Morris)			C,D,AE	(3)				3												
m. Utensil and Instrument Sterilizer (Wilmot-Castle)			C,D,AE	(3)				3												
Sterilizers-Electric (American)			C,D,AE	(4)				4												
o. Sterilizers-Electric (Hosp. Supply)			C,D,AE	(3)				3												
p. Sterilizers-Electric (Scanlan-Morris)			C,D,AE	(4)				4												
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program (Cont'd) per 11b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7. (Cont'd)																				
q. Sterilizers-Electric (Wilmont-Castle)	DO	DO	C,D,AE	(3)					3											
r. Army Field Steam Generator	DO	DO	I	(1)					1											
s. Army Field Steam Generator (Oilbilt)																				
(1) Construction	Construction; design; function; heating mediums; service and repairs.	(MSSS Textbook; Manufacturer's Literature.)	C,D	(1)					1											
(2) Practical Exercise	Practice in service and repair of oilbilt, Army Field Steam Generator.	DO	AE	(4)					4											
t. Army Field Steam Generator (Cyclotherm)																				
(1) Construction	Construction; design; function; heating mediums; service and repairs.	(MSSS Textbook; Manufacturer's Literature.)	C,D	(1)					1											
(2) Practical Exercise	Practice in service and repair of cyclotherm, Army Field Steam Generator.	DO	AE	(5)					5											
u. Gasoline Burner (Coleman)	Construction; design; function; heating mediums; service and repairs.	TN 8-615	C	(1)					1											
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				
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TRAINING PROGRAM FORM SG 428, AUG 10 1943

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Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program (Cont'd) Sec. III par. 164.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7. (Cont'd)																				
V. Small Officer Sterilizer (All Manufacturers)	DO	DO	G, D, AE	(3)						3										
8. As Anesthesia Equipment, Oxygen Therapy Equipment, Resuscitators, and Metabolism. General Principles of Anesthesia.				56																
a. Gas Machines																				
(1) Truck Model (Heidbrink)																				
(a) Construction	Construction; function; service; repairs; high pressure reducer and regulator valve; flowmeter head; absorber and other vaporizers; face inhaler assembly; gas leaks.	(Pharmacology of Anesthesia Drugs, Adremit; Art of Anesthesia, Flager; MSSS Text-book, Manufacturer's Literature.)	C, D.	(2)						2										
(b) Practical Exercise	Practice in repairs and services of the Heidbrink; Truck Model, Gas Machine.		AE	(12)						1	11									

TRAINING PROGRAM FORM SG 426, AUG 10 1943



Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program (Cont'd) *pg. 16 b.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
Sec. (Cont'd)															
(2) Portable, (Heidbrink)	Construction; function; service and repair.	(MSSS Textbook; Manufacturer's Literature)	AE	(2)						2					
(3) Sargraph (McKesson)															
(a) Construction	Construction; function; service and repair; high pressure reducer and regulator valve; center control head; absorber and other vaporizer; high pressure tubing and face inhaler assembly; gas leaks.	(MSSS Textbook; Manufacturer's Literature.)	C, D	(2)						2					
(b) Practical Exercise	Practice in repair and service of Gas Machine; Sargraph, (McKesson)	DO	AE	(10)						10					
(4) Truck Model (McKesson)	Construction; function; service and repair.	(MSSS Textbook; Manufacturer's Literature.)	AE	(1)						1					
(5) Portable (McKesson)	DO	DO	AE	(2)						2					
b. Oxygen Therapy Equipment															
(1) Circuit Type Unit (Heidbrink)	Construction; function; service and repairs.	TM 8-617 (MSSS Textbook; Manufacturer's Literature.)	C, AE	(1)						1					
(2) Oxygen Ther-apy (Heidbrink)	B.I.B. masks and nasal catheter.	DO	C, AE	(1)						1					



Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program (Cont'd) Sec. III per 164.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8b. (Cont'd)																				
(2) (McKesson)	DO	DO	C, AE	(3)								3								
(3) (Sanborn)	DO	DO	C, AE	(3)								3								
9. X-Ray Equipment																				
a. Historical																				
Discovery of x-ray; first x-ray apparatus; evolution of equipment; development of present day equipment.																				
(MSSS Textbook; L, C Modern Physics of Roentgenology, Muncheryan.)																				
(1)																				
b. X-ray Dangers																				
Protection; dangers to patient and operator; difference between primary and secondary radiation; precautions; effect of electricity on the human body; value of grounding; tolerance dosage to human body; first aid.																				
(TM 8-240; 8-275; C, D (MSSS Textbook; Bureau of Standards Handbook #15, 1940.)																				
(3)																				
c. X-ray Physics																				
) Fundamental Principles in its involved in the construction of x-ray units; wiring diagrams; circuits; operation of units.																				
(TM 8-240 (MSSS Textbook; Modern Physics of Roentgenology, Muncheryan; Fundamentals of Radiography, Eastman Co.)																				
C, D																				
(4)																				
(2) Practical Exercise																				
Practice in the operation of x-ray machines.																				
DO																				
AE																				
(3)																				
3																				
TRAINING PROGRAM FORM SG 422, AUG 10 1943																				



Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program (Cont'd) Sec. III, para. 14.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK										
					1	2	3	4	5	6	7	8	9	10	11
9. (Cont'd)															
d. Tools															
(1) MS-7 Kit	Names of tools in MS-7 tool kit; proper use of each tool; machine shop practice and workmanship.	(MSSS Textbook)	L.C.D	(1)		1									
(2) Practical Exercise	Shop practice with tools and test-meters; soldering and splicing wires; drilling and tapping holes and the proper use of files and saws.	DC	AE	(5)		5									
e. X-ray Tubes															
(1) Characteristics	History of the original x-ray tubes; review of electron theory; principles of operation of the gas tube; principles of operation of the modern hot cathode; materials; purpose and need of various sized focal spots; characteristics of different radiators on modern tube; common tube troubles.	(MSSS Textbook; Fundamentals of Radiography, Modern Kodak Co.; Modern Physics of Roentgenology, Muncheryan.)	L.C.D	(3)		2	1								
(2) Practical Exercise	Location and correction of various tube troubles.	DO	AE	(4)		4									
f. Valve Tubes and Rectification	Purpose and construction of tube; how employed in x-ray service; various types, location, and correction of various faults; principle of rectification; various types used; need and use of polarity indicator with this type rectifier.	(MSSS Textbook; L.D, AE Modern Physics of Roentgenology, Muncheryan.)	L.D, AE	(4)		4									

Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program (Cont'd) *Sec. II par. 16.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9. (Cont'd)																				
g. Transformers	Brief review of electromagnetic induction; explanation of various types of transformers employed; material used in construction; various transformer laws regarding size of iron and wire necessary.	(MSSS Textbook; Modern Physics of Roentgenology, Muncheryan; Electrical Engineering in Radiology, Sarsfield.)	I, AE	(4)																
h. Shockproof Cables	The characteristics, purpose and sources of trouble in shockproof cables.	DO	C, D	(1)																
i. Blueprints & Circuits																				
(1) Circuits	Indication of two types of drawings, schematic and pictorial; the use of various blueprint symbols; following circuit through x-ray apparatus and the location of apparatus faults by means of blueprints.	(MSSS Textbook; Manufacturer's Blueprints and Instructions.)	C, D	(2)																
(2) Practical Exercise	Practice in following circuit through x-ray apparatus and the location of apparatus faults by means of blueprints.	DO	AE	(6)																
j. Control Devices																				
(1) Timers, Meters, & Stabilizers	Show various types of timers and synchronous timers, hand timers; various types employed; timer examination program form 56 426, AUG 10 1943	(MSSS Textbook; Manufacturer's Literature; Electrical Engineering in Radiology, Sarsfield.)	C, D	(2)																
TRAINING PROGRAM																				

Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program (Cont'd) *Sec. III per 164.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9f. (1) (Cont'd)	planations; adjustment of timers; spin top method of determining accurate timing; different types of meters employed and how used; construction of AC & DC meters; principles of MAS meters; filament controls; the various types used and how pre-reading filament meter can pre-determine current through the x-ray tube; stabilizers; their hook-up; need of stabilizers under various operating characteristics; the principles upon which the various protective devices operate.																			
(2) Practical Exercise	Detection and repair of faults in timers, meters, stabilizers.	DO	AM	(6)									6							
k. 15 MA Unit (Kelly-Koette)	The component parts of this unit; principle of its operation; study of blueprints and possible faults.	MSBS Textbook; Manufacturer's literature.)	L,AE	(3)									3							
l. 15 MA Unit (Mattern)	Study of its component parts; method of employing the meter for line voltage and pre-reading filament characteristics; the study of the blueprint and determination of possible various faults.	DO	L,AE	(3)									3							
m. 30 MA Unit (Kelly-Koette)	Employment of technic selector band; employment of overhead breaker and air-type contactor; study of the circuit diagram and various contemplated faults.	DO	L,AE	(4)										4						

TRAINING PROGRAM FORM SG 428, AUG 10 1943



Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program (Cont'd) Sec. III per. 16d.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9. (Cont'd)																				
n. 100 MA Unit (Kelly-Koette)																				
(1) Character- istics	Explanation of various controls; inter-connection between the control and transformer; principle of bucking winding to compensate for various MA load characteristics.	DO	C,D	(1)															1	
(2) Practical Exercise	Determination of various faults and methods to correct these faults.	DO	AE	(4)															4	
o. 200 MA Unit (Kelly-Koette)																				
(1) Character- istics	Explanation of the various controls of these units; use of resistors to obtain various valve heats; bucking winding technic selector; principle and method of employing an oil immersed high tension switch; method of rectifying AC from the transformer to employ a DO meter.	DO	C,D	(2)															2	
(2) Practical Exercise	Detailed study of blueprints of this machine; determination and correction of faults.	DO	AE	(5)															5	
p. 200 MA Unit (Picker)																				
(1) Character- istics	Explanation of the filament meter compensating arrangement; explanation of method whereby various	(MSB Textbook; Manufacturer's Literature.)	C,D	(2)															2	
TRAINING PROGRAM FORM 38 428, AUG 18, 1943																				



Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program (Cont'd) *Sec. III per 16b.*

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9. (Cont'd)																				
t. 200 MA Unit (Westinghouse)																				
(1) Characteristics	Booster relay for valve heaters; purpose of the double trigger switch; rectification of the MA current for utilization of a DC MA meter.	DO	C, I	(2)										2						
(2) Practical Exercise	Detailed study of circuit blueprints; location of various possible faults.	DO	C, D	(4)											4					
u. 200 MA Unit (General Electric)																				
(1) Characteristics	Explanation of the Kenotron filament indicator; explanation of the filament increment curve and line voltage compensation curve; explanation of the change-over switch employed; details of the timer hook-up into this unit and explanation of the two contact hand-switch for stereo work; methods to determine true line voltage.	DO	C, D	(2)											2					
(2) Practical Exercise	Detailed study of circuit blueprint; location of various possible faults.	DO	AE	(4)											4					

RESTRICTED

TRAINING PROGRAM FORM SG 428, AUG 10 1943

RESTRICTED





Technical

Detailed Program (cont'd) per 16b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9. (Cont'd)																				
Y. Cassette Changers																				
(1) Characteristics	Purpose and different principles employed; proper installation; recognition of various faults; service and correction of same.	TM 8-625 (MSSS Textbook; Manufacturer's Literature.)	C,D	(1)										1						
(2) Practical Exercise	Recognition of faults, service and repair of cassette changers.	DO	AE	(4)									3	1						
Z. Photo-Boentgen Unit & Stereoscopes	Use and why employed; recognition of various operation faults; service and correction of various defects.	(MSSS Textbook; Manufacturer's Literature.)	G,D	(3)										3						
aa. 200 MA Unit (Mattern)	Explanation of various controls of this unit; practical demonstration of the procedure of taking a radiograph; darkroom technique.	DO	C,AE	(2)										2						
b. Army Field Unit																				
(1) Characteristics	Need for this type of unit in the field; scope of the work possible with unit; various controls used packing and unpacking of this unit in chests; recognition of faults; methods of correcting same.	TM 8-632; 8-633; 8-635 (MSSS Textbook; Manufacturer's Literature.)	C,D	(4)										4						
(2) Practical Exercise	A very detailed study of the wiring hook-up of this unit; practice in detecting and correcting faults.	DO	AE	(12)										12						
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Detailed Program (Cont'd) per 16b.

Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9. (Cont'd)																				
cc. Foreign Body Localization	Detailed explanation of principles; reason for using fluoroscopy; each student performs a localization individually.	TM 8-275; (MSSS Textbook; Manufacturer's literature.)	D,AE	(3)																
Army Field Table	Rapid packing and unpacking of this table into the special chests; type of work possible with this table utilizing the Army Field Unit; explanatory adjustments and the service to be done on this unit.	TM 8-632 (MSSS Textbook; Manufacturer's literature.)	C,D,AE	(3)																
ee. Army Airflow Unit																				
(1) Characteristics	Proper packing and unpacking of this unit in special chests; rapid set-up of unit; types of work possible; a detailed study of circuit.	DO	C,D	(2)																
(2) Practical Exercises	Practice in packing and unpacking the unit; rapid set-up; service and repair of unit.	DO	AE	(5)																
ff. Gasoline Motor Generator																				
(1) Characteristics	Principle of the unit; how this unit is built especially for x-ray unit use; principle of a gasoline engine and power factor correction built into generator; complete assembly and disassembly of the unit; location of faults and correction.	TM 8-630; TM 8-275. (MSSS Textbook, Manufacturer's literature.)	C,D	(4)																

TRAINING PROGRAM

FORM SG 428, AUG 10 1943

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## 208

## Detailed Program (Cont'd) Sec. III par. 16A.

## Detailed Program (Cont'd) Sec. III par. 16A.

[illegible]

Program for Medical Equipment Maintenance Technicians

Technical

Detailed Program (Cont'd) per. 11b.

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9. (Cont'd)																				
10. Emergency Repairs	Explanation of what can be done to make apparatus operate in spite of various defects; various examples of ingenious methods of keeping apparatus operating.	DO	C, D	(2)															2	
11. Trouble Shooting	Various faults are set into the apparatus and the student is given a blueprint and voltmeter and told to locate and repair the fault.	DO	AE	(12)															(12)	
(1) Practical Exercise																				
12. Refresher Work (Practical)	Each 200 MA unit is reviewed; student is directed in method of approaching service problems on various pieces of apparatus.	DO	AE	(11)															11	
13. Processing Problems (Practical)	Films of various types having different faults are shown to students; view toward enabling various types of faulty results being recognized; steps being taken to correct faults.	DO	AE	(9)															9	
14. Dental Equipment (Practical)	Construction, repairs and service of Bitter, S.S. Units, and Weber Units and accessory dental equipment.	TM 8-638 (MSSS Textbook;	AE	(36)															36	
TRAINING PROGRAM FORM SG 426, AUG 10 1943																				

Program for Medical Equipment Maintenance Technicians

Detailed Program (Cont'd) *pg. 116.*

Technical

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK											
					1	2	3	4	5	6	7	8	9	10	11	12
11. Shop Work	Trainees work under detailed supervision of instructors in this practical phase of "on-the-job" training in the service and repair of Medical Department equipment.	All previous references	AT	72												
12. Time Reserved for Commandant				32	2	2	2	2	2	2	2	2	2	2	2	2
TOTAL HOURS				608	36	36	36	36	36	36	36	36	36	36	36	36



Program for Optical Technicians

Technical

Summary Program / 720

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4. History of Optics	History and basic principles of optics.	(MSSS Optical Text)	L	1	1															
5. Army Optical Program	The optical program of the Army.	DO	L	2	2															
War Department Policies and Regulations	Policy and regulations governing issuance of spectacles.	WD Pamphlet 8-5 (MSSS Optical Text)	L, C	3	3															
7. Prescription for Spectacles	The component parts of an optical prescription.	DO	C, D	3	3															
8. Focal Power of Ophthalmic Lenses	Light refraction and measurements.	(Focal Power of Ophthalmic Lenses, American Optical Co.; Series #9428 - Modern Ophthalmic Lenses, Orlite.)	C, D	6	3	3														
9. Facial Measurements	Procedure for taking facial measurements before prescribing spectacles.	(MSSS Optical Text)	C, D, AE	5	2	3														
10. Interpretation of Prescription	Correct methods of prescription interpretation.	DO	C, D, AE	9	3	3	3													
11. Adjusting & Fitting	Procedure for adjusting and fitting spectacles.	DO	C, D, AE	12	2	2	2	2	2	2										
TRAINING PROGRAM				FORM SG 426, AUG 10 1942																

Program for Optical Technicians

Technical

Summary Program (Cont'd) / 7a

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
					15	16	17	18	19	20	21	22	23	24	25	26	27	28
12. Stock Control	Maintenance of stock and control of optical materials.	WD Pamphlet 8-5; (MSSS Optical Text)	C,D	6	2	1	2	1										
13. Marking and Cutting Lenses	Use of various instruments for marking and cutting.	(MSSS Optical Text)	C,AE	19	4	5	6	4										
14. Edging	Methods of edging lenses.		C,AE	26	3	5	5	5	8									
15. Bench Work Assembly	Proper methods of spectacle assembly.		C,D,AE	37	4	4	5	8	6	10								
16. Surface Grinding	Correct methods for blocking and polishing of lenses.		C,D,AE	42	3	4	4	6	12	13								
17. Spectacle Inspection	Checking frames and lenses.		C,AE	15	1	2	3	3	3	3								
15. Emergency Repair of Spectacles	The use of solder and lensstick.		C,AE	16		4	3	3	3	3								
19. Equipment Maintenance	Maintenance and repair of optical equipment.		C,AE	12			3	2	2	5								
20. Shipping and Packing	Methods of packing and shipping spectacles.	(MSSS Optical Text)	C,D	2				2										
21. Time Reserved for the Commandant				12	2	2	2	2	2	2								
TOTAL HOURS				228	38	38	38	38	38	38								

TRAINING PROGRAM FORM SS 426, AUG 10 1943

Program for Optical Technicians

Technical

Detailed Program 426		TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
SUBJECT	SCOPE				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4. History of Optics	Orientation, history and basic principles of optics.	(MSSS Optical Text)	L	1	1															
5. Army Optical Program	History of Army Optical Program; the reasons for and use of the Mobile, Base and Portable Optical Units.	DO	L	2	2															
6. War Department Policies and Regulations	Policies covering issuance of spectacles; classification of spectacles; repair of frames; Army type and others.	WD Pamphlet 8-5, 20 Jan 44 (MSSS Optical Text)	L, C	3	3															
7. Prescription for Spectacles	Selection of fronts, temples, and lenses; recording prescriptions; maintenance of stock records as to breakage and issue.	DO	C, D	3	3															
8. Focal Power of Ophthalmic Lenses				6																
A. Spherical & Concave Lenses	Principles of light refraction; refraction by spherical and concave lenses and dioptric measurements of these lenses.	(Focal Power of Ophthalmic Lenses, American Optical Co.; Series #9428 - Modern Ophthalmic Lenses, T. E. Orlig.) (Shelton Co., Phila.)	C, D	(3)	3															

TRAINING PROGRAM FORM SG 426, AUG 10 1943



Technical

Detailed Program (Cont'd), 72

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8. (Cont'd)																				
b. Astigmatic & Compound Lenses	Refraction by astigmatic and compound lenses and dioptic measurements of these lenses.	DO	C,D	(3)		3														
Facial Measurements				5																
a. Measurements	Procedure for measurement of bridge, eyegaze, pupillary distance, temple length and lens.	(MSSS Optical Text.)	C,D	(2)	2															
b. Practical Exercise	Practice in taking facial measurements.	DO	AE	(3)		3														
10. Interpretation of Prescription				9																
a. Interpretation	Interpretation as to focal, stock, eye range, color, bi-focals, prisms, decentration.	DO	C,D	(3)	3															
v. Practical Exercise	Practice in interpretation of prescriptions.	DO	AE	(6)		3	3													
11. Adjusting & Fitting				12																
a. Procedure for Adjusting and Fitting.	Measuring vertex distance; adjusting bridge, temples, fitting cellulose covering temples.	(MSSS Optical Text).	C,D	(2)	2															
TRAINING PROGRAM FORM SG 428, AUG 19 1943																				

Program for Optical Technicians

Technical

Detailed Program (Cont'd) 172

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
11. (/cont'd)																				
b. Practical Exercise	Practice in adjusting and fitting spectacles.	DO	AE	(10)		2	2	2	2	2										
12. Stock Control				6																
a. Lenses	Maintenance and control of lens stock.	WD Pamphlet 8-5 (MSSS Optical Text)	C,D	(2)	2															
b. Frames	Maintenance and control of frame and temple stock.	DO	C,D	(3)		1	2													
c. Expendable Supplies	Maintenance and control of expendable supply stock.	DO	C,D	(1)				1												
13. Marking and Cutting Lenses				19																
a. Use of Vertometer	Use of Vertometer, study of de-centrations hand and automatic marking and cutting.	(MSSS Optical Text)	C	(4)	4															
b. Practical Exercise	Actual practice in the use of the vertometer, study of decentration, hand and automatic marking and cutting.	DO	AE	(15)		5	6	4												
14. Edging				26																
a. Rimless & Band Edging	Edging of lenses by rimless edging, band edging.	DO	C	(3)	3															
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

Technical

Detailed Program (Cont'd), 28

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
14. (Cont'd)																				
b. Practical Exercise	Actual practice in edging.	DO	AE	(23)		5	5	5	8											
15. Bench Work Assembly				37																
a. Frame and Rimless Assembly	Procedure for assembling frame and rimless spectacles.	DO	C,D	(4)	4															
b. Bifocals	The assembly and cementing of bifocals.	DO	C,D	(4)	4															
c. Practical Exercise	Practice in assembly of frame and rimless spectacles; cementing and assembly of bifocals.	(MSSS Optical Text.)	AE	(29)			5	8	6	10										
16. Surface Grinding				42																
a. Blocking & Roughing	Procedure for blocking and roughing of lenses.	DO	C,D	(3)	3															
b. Fining and Polishing	Procedure for fining and polishing of lenses.	DO	C,D	(4)	4															
c. Practical Exercise	Practice in blocking, roughing, fining and polishing of lenses.	DO	AE	(35)			4	6	12	13										
17. Spectacle Inspection				15																
TRAINING PROGRAM FORM SG 426, AUG 10 1943																				



## Program for Optical Technicians

## Technical

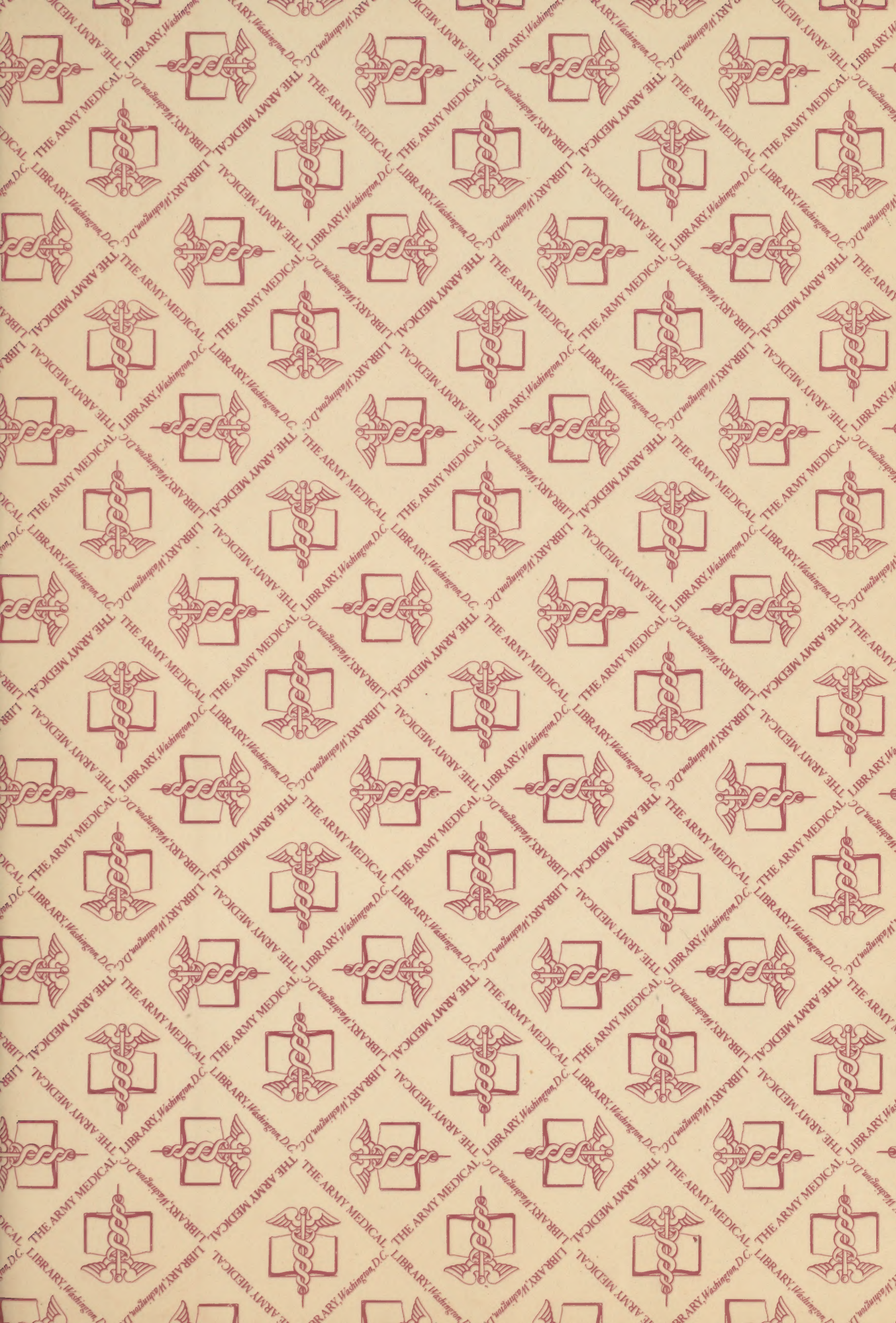
Detailed Program (Cont'd) / 26

SUBJECT	SCOPE	TEXT REFERENCE	METHOD OF PRESENTATION	TOT. HRS.	HOURS PER WEEK															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17. (Cont'd)																				
a. Lenses and Frames	Neutralization of lenses and checking of frames.	DO	C	(3)	1	2														
b. Practical Exercise	Practice in spectacle inspection.	DO	AE	(12)			3	3	3	3										
18. Emergency Repair of Spectacles				16																
a. Methods	Soldering; use of lensstick; repair of xylonite frames.	(KSSS Optical Text)	C	(11)		4														
b. Practical Exercise	Practice in spectacle repair.	DO	AE	(12)			3	3	3	3										
19. Equipment Maintenance				12																
a. Methods	Maintenance and repair procedures for optical equipment.	DO	C	(3)			3													
b. Practical Exercise	Actual practice in repair and maintenance procedures.	DO	AE	(9)				2	2	5										
20. Shipping and Packing	Packing and shipping of spectacles.	DO	C, D	2				2												
21. Time Reserved for Commandant				12	2	2	2	2	2	2										
TOTAL HOURS				228	38	38	38	38	38	38	72									
TRAINING PROGRAM FORM SG 428, AUG 10 1943																				

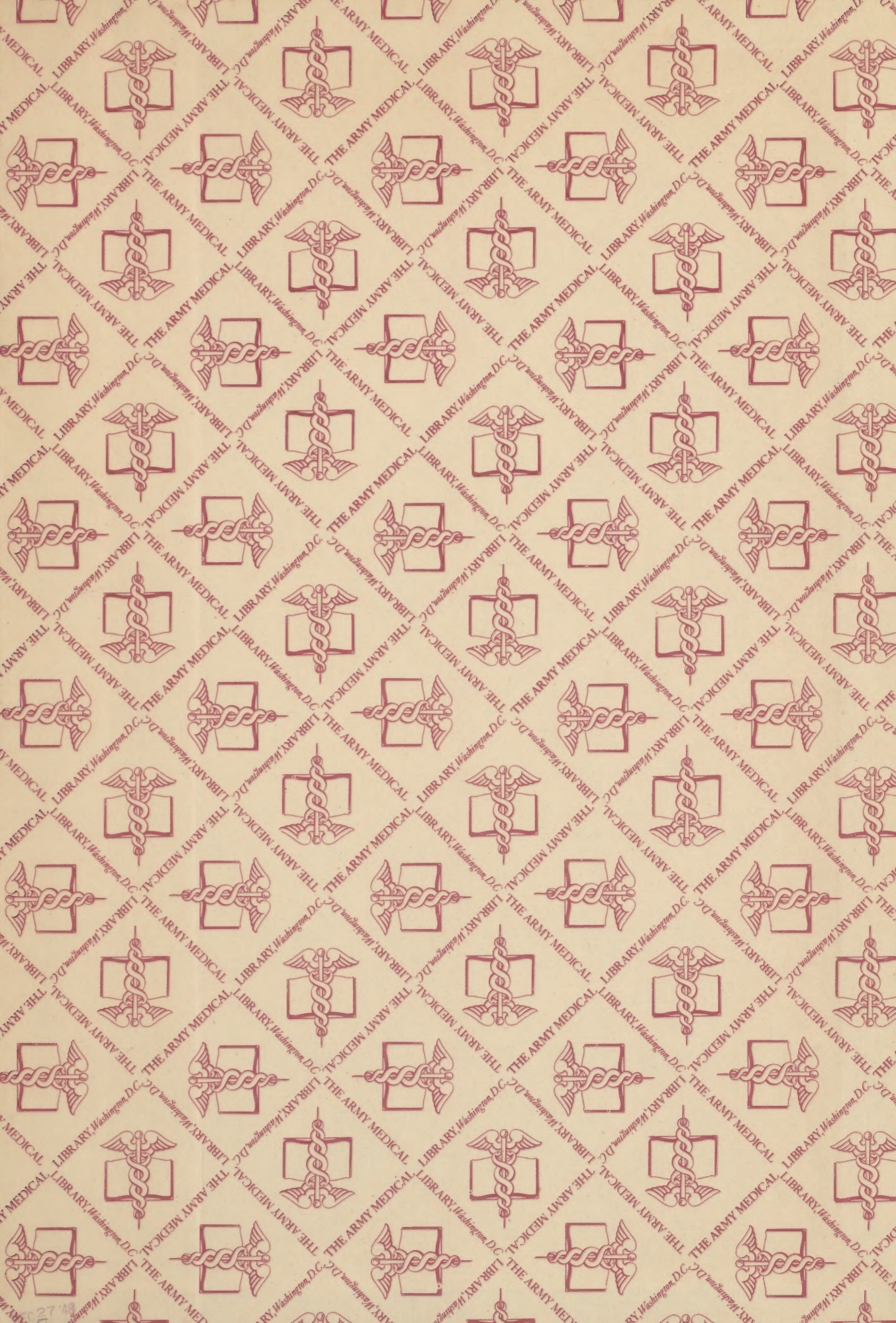














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